

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

VICKS MAGAZINE

VOL. 22

ROCHESTER, N. Y., MARCH, 1899.

No. 5

THE CACTUS DAHLIA.

DAHLIAS are well-known tuberous-rooted plants which produce from mid-summer until frost a profusion of flowers of the most perfect and beautiful forms and varying colors. Within the past few years a considerable amount of care and attention has been bestowed on them, and this has resulted in the production of some very distinct types and a great many very beautiful varieties, so that our florists have found it necessary to divide them into several classes, viz.: Show or Fancy, Pompon or Bouquet, Dwarf or Bedders, and the Cactus-flowered, the latter being a class of comparatively recent introduction, and one that is becoming more popular each year. The flowers are of large size and peculiar form, the undivided florets having, perhaps, a fanciful resemblance to the bloom of some species of cactus, whence the popular name is derived.

The flowers are borne on long stems, and are splendid for cutting. The plants grow quite tall, from three and one-half to four feet in height, and produce their flowers in great abundance.

Whether grown in beds, or as single specimens, or groups in the mixed border, they should be given a very deep, well-enriched soil, an open, sunny situation, and sufficient space in which to properly develop themselves. The tubers should not be planted out until about the middle of May, in this region, covering the neck to the depth of three inches. If too many shoots start remove some of the weaker ones, and upon the approach of hot, dry weather form a shallow basin around the plants and give a mulch of about three inches of good stable manure. This will not only keep the roots cool and moist, but will make it more convenient for watering, for in hot, dry weather the plants will do better and produce finer flowers if given occasional thorough waterings. A stout stake about four feet in length should be driven into the ground close by the plants, and to which the shoots should be securely tied whenever necessary, and all flowers removed as soon as they begin to decay.

Several days after the plants have been destroyed by frost remove the tops to within six inches of the neck, take up the tubers carefully, label them, and after they have been allowed to dry in the sun or open shed, place in boxes of dry sand and then remove to a warm, dry cellar, where they can remain until the tenth of May, when the tubers can be carefully divided into pieces, each with an eye or crown, and planted outside again. During the winter it will be advisable to occasionally examine

the tubers to see that they are not starting at the eyes, in consequence of too much warmth and moisture. A cellar with an average temperature of 50° will be an excellent place in which to winter them.

The flowering season can be considerably prolonged by dividing the tubers in April and then starting, and keeping them growing, in pots in the hotbed or greenhouse until about the end of May, but I fear that only a few of our amateur cultivators would care to adopt this plan.

There are so many varieties of this type of dahlia in cultivation that it is really difficult to select a few of the most distinct, but all of the

following are very desirable and can be procured at a very reasonable cost.

CLIFFORD W. BRUTON

— Flowers very large, from five to six inches in diameter, and of a solid, pure yellow color, and are borne on remarkably long stems.

CONSTANCY—A strong grower and profuse bloomer, with regular and symmetrical flowers of a rich, reddish orange shaded bronze and tipped white.

HENRY PATRICK—An early, profuse and continuous bloomer with waxy white flowers of great size and substance, never showing the center, and borne on long stems. The best white Dahlia in cultivation.

KYNERITH—A variety of English origin, with vivid vermilion colored flowers.

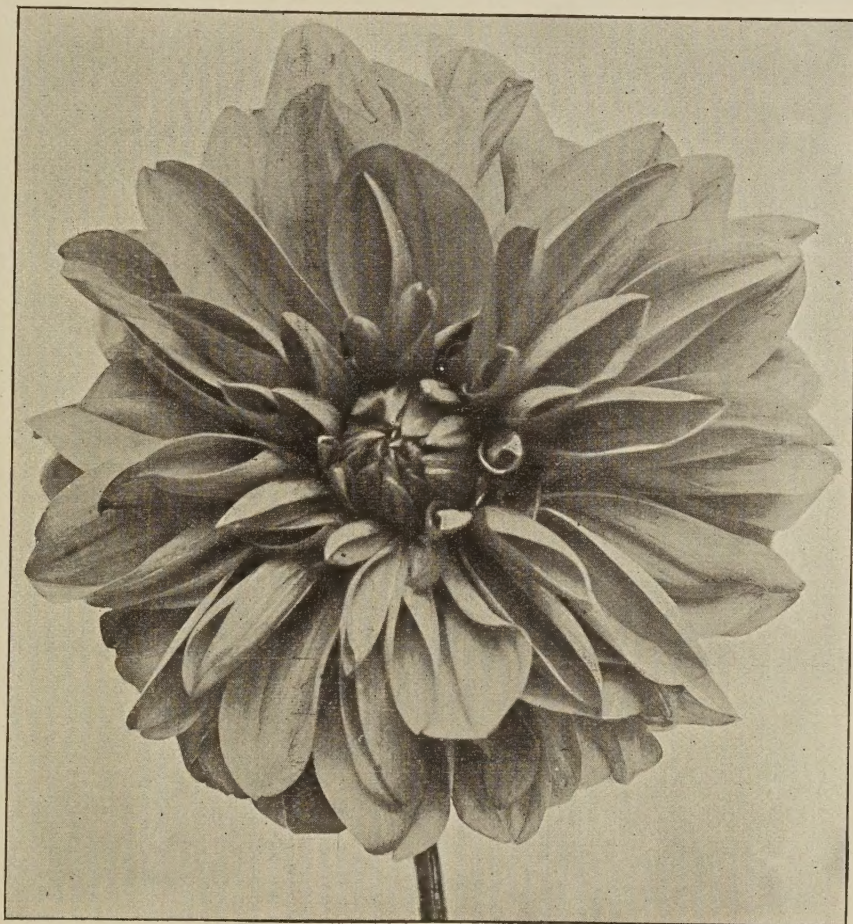
NYMPHÆA—A strong-growing variety of medium height, the flowers being of a clear, distinct pink color, large size and perfect form, closely resembling pink water lilies, which suggested its name.

WILLIAM AGNEW—

This variety occupies a very prominent place among the Cactus Dahlias, on account of its color and size. When well grown it will measure more than seven inches across and apparently perfect in every respect, being full and perfectly developed from edge to center. The color is an intense dazzling red.

ZULU—This is one of the best very dark colored varieties, being a very dark maroon, almost black. Flower of very fine form.

The above are only a few of the really excellent varieties which are now offered. There are many other shades of colors, and some with parti-colored flowers. These varieties are not all closely alike in form, but they all show a somewhat similar variation from the so-called Show dahlias with their precise regularity of florets. Florists may yet discriminate and define the forms of this class more closely. The considerable latitude of variation recognized among them is clearly acknowledged by



From an original photograph

CACTUS DAHLIA
CLIFFORD W. BRUTON

some dealers, and some writers, in designating the lists of varieties as *Cactus* and *Decorative Dahlias*, and indicating by particular marks those considered nearest the *Cactus* type. That this type of flower should be, as at present, loosely defined is only what might be expected when it is remembered that it is but a few years since the first specimen of it appeared.

CHARLES E. PARNELL.

Floral Park, N. Y.

* *

A HARDY BEGONIA.

PENNSYLVANIA lately introduced to me an old friend under a new name, and pointed out in it unsuspected merits. This friend is dear old Begonia Evansiana, or *B. discolor*, as it is also called. While I was yet a child there was among our house-plants, a begonia that enlarged its borders marvelously fast, until we rebelled at the size of the box it obliged us to move around. To avoid further heavy lifting we adopted the plan of dividing the plant every year and setting the surplus in shaded outdoor beds, under the benches in our little cold greenhouse, or giving them away.

The plants were always veiled with a thick mist of pretty pink flowers in summer, but in winter they so soon showed signs of "that tired feeling" that we usually stowed the box under the lower greenhouse benches and left it until spring. Then a few waterings would start a thick mass of strong shoots to growing, and of these we cut away all but four or five of the best. Often, under the benches and in the beds, we would find little plants springing up, but a hardy begonia was not considered among nature's possibilities for our climate, so we merely supposed that tiny roots or seeds had been scattered among the litter of the beds, in some way, when the big box plant was replanted. Not until last summer did I learn that my old friend really is hardy. Up in Chambersburg, Pa., there is a bed of it, two and one-half feet wide by twenty-five feet long, that has been there for years. All summer long, for many seasons, it has been a thing of beauty, and in winter has merely the protection of its own frost-bitten tops. The picture, from a photograph taken last September just before frost, will give some idea of the beauty of this bed and of its situation.

Here in Harrisburg I frequently hear people clamor for just such a plant to grow along damp, dark alley-ways between tall brick houses. The grass will not grow in such places and even hardy ferns soon become discouraged. This hardy begonia is just the plant for such a place, as is shown by its growing and blooming so beautifully there for so long. It will endure considerable sun in summer, but in a place where the sun falls warm in winter, thawing the ground quickly after hard freezing, the hardiness of the plant is severely tested. The roots are not hardy, I think, but only the tiny bulbils formed in the axils of the leaves. These are scattered like seeds by the plant, in fall, to reproduce its beauty in spring.

The leaves, as well as the flowers, are quite pretty. They are large, metallic bronze, threaded with crimson veins above, and silvery underneath. I have heard people who loved to tack the name of a popular plant on as a surname to everything which grows, call the plant "Grape Geranium," because of some imagined likeness of its leaf to a grape leaf.

I am told that this hardy begonia has been successfully naturalized in some of the woodlands around Washington, and dearly I would love to see it growing there. Next season I shall experiment with it in the grove and shrubbery at home. The plants would need to be thinned and transplanted yearly, I think, in garden beds, for the bulbils are scattered thickly, and the young plants would grow into a weak, wild tangle, giving only few and small flowers, unless room were given, by transplanting, for better development.

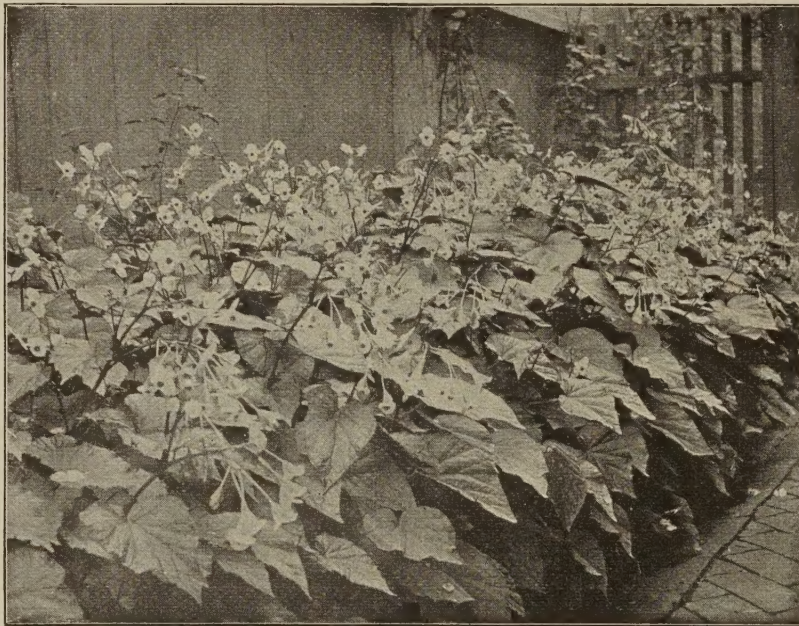
L. GREENLEE.

THE GARDEN OF OUR DREAMS.

WHILE frost still locks each plot and border, and snowdrifts bar the garden gate, those fairest flower beds of all the year, spring into fragrant bloom. The dealers sow the seeds. As early as January they begin scattering over the land those persuasive suggestions of what might be. In the plant-lover's heart and brain is fertile soil, and there imagination suns, and hope waters, and no garden planted elsewhere ever approaches in loveliness this one, the cloud-land of anticipation. If experience had not taught that possessions hoped for always excel any grasped in the hand, it would be a marvel how each season can see our enthusiasm awake in undimmed freshness. Of course, we know that, though a steady advance is being made, by hybridizing and selection, in all sorts of vegetables and flowers, yet is the gain excessively slight year by year. Still do we gulp down each largess of fulsome praise, and confidently look for new tomatoes, beets and muskmelons entitled to supplant all varieties of former years. We remember what pretty fringed petunias we once raised from a package of inexpensive seed, and with the brilliant lithograph ideal before our eyes, see, in fancy, our flower beds and window gardens aglow with petunias in ruffled and variegated splendor such as reality is never likely to achieve. Each novelty possesses for us now every good quality a plant can have. Hardy pinks spread rapidly into beds of spicy bloom, pansy faces are hardly to be hid by a silver dollar, and the climbing clematis scarce shows its leaves through the multitude of blossoms.

And, behold, in that garden never an ugly weed. A little pleasant exercise with rake and hoe in the dewy morning (Ah, the joy of the balmy freshness, mention of those out-of-door mornings suggests to winter-housed souls!) no weed sees its second pair of leaves, no drouths are felt where soil is so constantly stirred. Tobacco, kerosene emulsion and whale oil soap will kill every insect at the first application, cutworms are dug out with a turn of the knife, rose bugs and cabbage worms do not daunt us. Are not sun and earth, rain and dew all our co-workers? We labor in partnership with a bounteous, never-wearying mother, and knowing she will never fail us, dream that we shall know no weariness in our ministrations.

And why not? Thoreau says "Build your air castles, then go to work and put foundations under them." Just because we are strong in hope, and have room in



A BED OF HARDY BEGONIAS.
B. EVANSIANA, OR *DISCOLOR*.

our hearts for the ideal, we are good gardeners, and we do realize our dreams—or, at least, something is striven for. Every season some plant repays us amply for our care. We may not be able to bestow the labor needed to produce all the luxury of foliage and flower with which our dream garden is crowded, but we, the individual plant lovers, are after all, the beautifiers of earth.

How desolate would be the quiet corners, how bare the village street, how unattractive the apartments, how lacking in charm the verandas lawns and dooryards but for our faithful efforts. Though we may never quite compass the floral splendors we gloat over while our flowers are still all in the catalogues, and winter stays the hands, we do add to those cheerful hours of anticipation many a vase and basketful of summer satisfaction.

"Let no rash hand invade these sacred bowers,
Irreverent pluck the fruit or touch the flowers;
Fragrance and beauty here their charms combine,
And e'en Hesperia's garden yields to mine."

A round of thanks to the catalogue maker. He may stretch the truth, and allure but to disappoint, but we are, after all, his debtors not only for much of summer's, but also, for not a little of winter's joy. But for his ingenious promptings how could such bowers of beauty bloom in those garden of our dreams?

ANNA M. TUTTLE.

North Haven, Conn.

GARDENIA ROSE.

ALL of the varieties of roses sent out by Mr. Manda, and which he has produced by hybridizing the Wichuraiana, are of much merit. An engraving of the variety Gardenia is here presented. This variety was described in our pages, in January, both by Mr. Manda, and Mr. MacPherson. All of these hybrids retain the peculiar trailing habit of the Wichuraiana, with its very long, slender, and very flexible stems. They are especially suitable for covering closely large spaces of ground, but they can, also, be trained up pillars or trellises, or over arches. Gardenia is said to bear almost a perfect resemblance to the flowers of the Gardenia or Crape Myrtle, both in form and color, hence its name. One of the parents was Perle des Jardins, and the flowers, which are from three to three and a half inches across when fully opened, are cream color and delightfully fragrant. In the bud they are a bright yellow, closely resembling the buds of Perle. The flowers are borne on stems from six to twelve inches in length, and are freely produced, and for a long season. When lying on the ground under the snow, in this climate, the Wichuraiana retains its leaves perfectly all winter, and this habit is perpetuated in the hybrid varieties. In a letter received from Mr. Manda on the 10th of January, of this year, he refers to them as "actually growing to-day, and making new growths and leaves out of doors, during the severe weather we have had lately."

Gardenia, as well as Jersey Beauty and Evergreen Gem, are only now just being sent out by the originator, and have not yet been largely propagated by growers generally, but those of this class of Mr. Manda's previous introduction, which are Manda's Triumph, Pink Roamer, South Orange Perfection and Universal Favorite, are all now available to the general public at low prices, and will, no doubt, be eagerly secured by amateur rose growers.

That these roses are available for use in a manner different from most others, and that they will greatly enrich our gardens there can be no doubt, and they should be welcomed by every lover of the Queen of Flowers.

* *

WILDINGS OF EASTERN OREGON.

ONE would scarce expect much in the way of wild flowers, who looked for the first time on our brown, bare hills in mid-summer, felt the scorching, midday sun and the sweeping winds that whirl and bluster on every ridge, noted the utter lack of dew at night, and the pearl-grey cloudless sky that gives not even a promise of rain to encourage the dried and parched vegetation. But there is an abundance of material for the entertainment of those who live near to nature's heart, and see in her every form an expression of a loving thought of divine care. Go with me down this cañon and see the water-loving plants that grow along the edge of the tiny spring-fed stream, over which you may easily step, that wanders down its entire length. Right in the stream

we find the yellow monkey flowers (*Mimulus*), luxuriant, and pretty, and they hold a secret that puzzles me; some of them have foliage strongly scented with musk, while others, grown in the same soil under exactly the same circumstances, bearing flowers precisely like those of the odorous leaved plant, possess absolutely no fragrance. Here on the edge of the stream grow the tiny blue and white lobelias in great colonies, and in this spot, shaded by the branches of a group of thorn trees are the delicate white blossoms that we call "baby feet." I know no other name for them, but they grow on slender stems from one foot to eighteen inches tall, are sweetly fragrant, and, though pure white in the shade, are delicately pink in the sun.

And this little island is full of bulbs, that, from their rocky fastnesses, send up each spring thick, round stems, often two feet tall, crowned with a

globular head of flowers, with thick, waxy white petals, a slender blue line through the center of each. This flower* is sweet scented, and lasts well when cut.

Great clumps of iris grow along the bank, its pale blue flowers interspersed with the blue and gold of the *Camassia esculenta*, or "Celestial Lily." Now and then you catch sight of a royal purple flower, shaped like a long-petaled single aster, with a large disk of golden yellow; but this flower sleeps most of the time, only opening between 9 A. M. and noon. When broken the stem exudes a milky substance. Peppermint betrays its presence by its strong scent, and a kind of myrtle grows in the water's edge. Clumps of willows bend above the frequent springs, and the "haw," with fierce thorns, stands guard over its millions of black, large seeded berries. The "Sarvice" with its lovely fragrant white blossoms followed by clusters of sweetish black berries, is another useful and ornamental tree.

Wild gooseberries grow tall and large and are laden with the very essence of acidity. Wild currant bushes are almost smothered beneath their beautiful, finely-flavored fruit. One

variety is yellow as gold, another a brilliant red, and in the season of fruitage they make a beautiful sight. Wild roses grow to a wonderful height, covered with festoons of rarely beautiful flowers, from pale blush to richest coral pink. Wild white clematis drapes the rocky walls of the steep cañon, and the shy golden-hearted pink daisy blooms in its shadiest depths.

"Everywhere about us they are glowing;
Some like stars to tell us Spring is born;
Others their blue eyes with tears o'erflowing,
Stand like Ruth amid the golden corn.

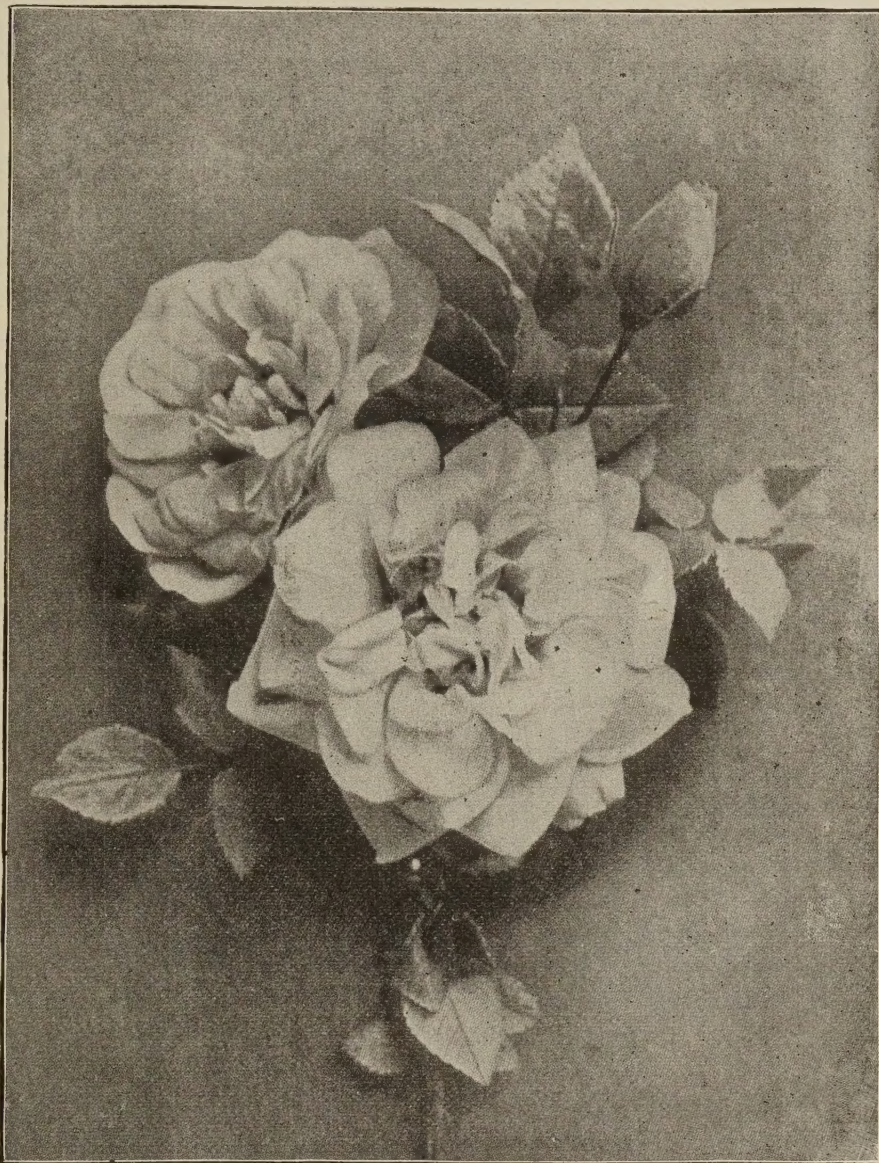
* * * * *

"In all places, then, and in all seasons,
Flowers expand their light and soul-like wings,
Teaching us, by most persuasive reasons,
How akin they are to human things."

Eastern Oregon.

EVAN.

*Allium?—ED.



GARDENIA ROSE.

SEED PODS.

THE Japanese name for Crimson Rambler means literally "cherry rose."

ADIANTUM TETRAPHYLLUM, of which I send a photograph, has always been a favorite of mine because it is so much easier to grow under ordinary indoor conditions than most sorts, and because it so much resembles our wild *Adiantum pedatum*.

THE ANTHURIUMS, too, deserve more appreciation than they ordinarily receive from amateurs. Some of their glossy, leathery flower-spikes are very bright-colored, making their name of "flamingo flower" very appropriate. These flowers always last a long time, sometimes for three or four months. Florists use them a great deal for brightening masses of dark palm foliage, and not infrequently ticket the flowers with their date of opening to see how long they will last. The leaves are handsome always, whether the plant is in bloom or not; and the plant is as easily grown as a palm. The picture of a bench of anthuriums which accompanies this "pod" was taken in that old paradise of exotics, the United States Nurseries, and was kindly given me by Mr. James R. Pitcher, of Short Hills, New Jersey.

CAMELLIA—At the Capital Park greenhouse, in Harrisburg, Pa., are some fine old camellia trees that are handsome in their season of bloom. The very double dark crimsons and pure whites are my favorites of all. In the gardens about Charleston, South Carolina, there are luxuriant camellia groves, but I seldom see fine plants in greenhouses, north.

LIFTING HEAVY PLANTS—In a family where I was visiting lately paterfamilias frequently remonstrated with his spouse for wasting so much of her valuable time upon house-plants. Lifting those heavy pots and boxes was suicidal, he said. "You can lift them for me whenever you like, dear," she replied sweetly, and then, picking up, her heavy, creeping baby from the porch, without a sign of disapproval from him, "none of them are so heavy as Marcie."

VIOLETS—Princess of Galles is a very popular violet just now; and the florists frequently sell to people whom they think do not "know" flowers of the big, bonny, blue Californias. The shape of the two violets is quite different, however. Princess opens more widely and its petals are wider and rounder, forming a nearly circular outline, much like the pansy.

THE GOLDEN GATE ROSE, as forced here in Harrisburg, is very beautiful—an exquisite rich creamy yellow, flushed near the edge of the petals with salmon-peach. The uncurling buds have an especially beautiful glow of color. The fragrance is rich and fruity. This rose is not at all new to florists' lists, but I have never seen it growing in outdoor gardens. Can some one tell me if it is fine there?

AZALEAS—I am hoping, as the azalea season draws round again, that the people who buy handsome azaleas in full flower at market, or at a florist, will sometime learn to keep them in cooler rooms, so that their beauty may last longer. An azalea ought to be beautiful for a month or more, and to bloom finely for several, perhaps a dozen years, if its owner treats it right between blooming seasons. We bed ours out in summer, under a lath screen, along with tuberous begonias and other plants of that sort. The plants are not taken from their pots; the latter are merely plunged. Next to the pure double white varieties the one shown in the picture is my favorite.

NEW CRIMSON ROSE—At the Philadelphia show last fall a beautiful new crimson rose called Liberty was exhibited. The two florists who control the stock say that it is the best crimson rose that has been introduced in a great many years, and the best rose of any kind introduced since Bridesmaid. It is a very fragrant rose of a vivid color, with superb buds, which they told me lasted a week or ten days after being

cut, without showing any purple tint—something Meteor cannot be persuaded to do. Liberty originated with Messrs. Alexander Dickson & Sons, of Ireland. It will not be introduced in this country till 1900.

L. G.

* * *

PLANT LABELS.

Poets, philosophers, orators and humorists have all tried their hands at setting forth instances of "manifest destiny," but there is one illustration of their theme which I have never seen adduced. It is one that will occur to the florist at once. Of course I refer to labels. Their "manifest destiny" is to have something invariably happen to them. A negro hand never shows what he can do in the shape of unexpected stupidities until he has to deal with a border of newly labelled roses. He will seem not to see either roses or labels until you have given your directions and left, then he will examine each label carefully (upside down), conclude it is some sort of a disfiguring tag (which it really is) and then deliberately pull it off and throw it away!

I once had seventeen splendid Hybrid Perpetuals which, after a season's growth, I proposed moving to a permanent border. I engaged a day laborer to take them in a wheelbarrow to the spot intended for them, and

with a view to keeping the labels right, tied each one to its proper bush as it was taken up. As the last bush was put on the wheelbarrow the door bell rang. A lady who wanted to save the parish by a valuable suggestion, had called, and I must leave my beloved roses, and hear what she had to say through all the time it was going to take her to say it. Turning to the man I said, "Wheel these bushes into the yard, near to the rose border, and wait for me when you get there. Mind, now, don't you set them out, wait for me." When the lady finally took her departure (at nearly sunset) I hurried out to the border to finish the work. There sat my "hand" on the edge of the wheelbarrow looking wonderfully well pleased with himself. My heart misgave me at once. "What have you done!" I asked, and, turning, saw he had deliberately tied all of those blessed labels in one bunch after laying the roses all along the border to be set out. He had done this he said "So's dey maught not get lost ner kivered up wid de dirt."

If you stick a label down near a flower there will come a heavy rain and wash it out of place, or the lettering will rub off before you are sure of your flower, or it will be dug

ADIANTUM TETRAPHYLLUM



up and carefully stuck back near a flower you have known all your life. Boys of any appreciable gifts in mischief enjoy stepping on labels to hear them "crunch" or use them as whittling sticks because they are generally made of white pine and are nice to cut." A hen always scratches on the label side of a flower, and a wellgrown leghorn of the chicken-salad age has been known to throw a label ten feet away with a vigorous kick of her muscular nether pin. I have observed in our town cows a decided preference for those yards where there are flowers; and, judging from the taste of such steak as I have bought from time to time, I am sure they have never failed to graze on the labels.

Nature is opposed to labels. She has her own and they are all appropriate and beautiful. In stem, and leaf, in habit of growth, in time and character of bloom, in every little working root, in the flavor of the sap, in every tiny cell wherewith she builds a plant, she tells what the plant is. With a delicate but unmistakable tracery the Divine Florist writes all over, and all through, his flowers what they are, and nature resents as an intrusion that we should hang a billet of dead wood on a flower and scribble thereon "Marechal Neil," or "Rat-tailed Cactus," as the case may be.

The true florist needs no label. "This running rose," he says, "is the Crimson Rambler; its dark narrow glossy leaves, its big gray stem, its

toughness and pliability, all tell us that it can be nothing else. This on the contrary is the Marechal Neil; its short, weak flower stems, its long, pale-green leaves, its smooth bark (save when old or dying), its scraggy perverse growth, its rich, mellow perfume, all these things make known its name." But there is a time with all of us when we are not florists, the time when we are mere beauty-loving ignoramuses. To such (as crutches to the cripple) we must allow labels, and the practical question is *how shall we keep these labels from the ten thousand pitfalls of destruction that await them.* I will give my conclusions:

First—Order from a thoroughly reliable florist who knows all the suicidal tendencies of labels and has learned how to keep them straight.

Second—As soon as the plants are set out, record name and place in a book, and—*hide the book.*

Third—Carefully wire the label to its plant a least six inches from the ground.

As a final precaution, when your flowers are subject to the mercy of the unreclaimed corn-field hand, warn him against digging very near those plants, for that you have put dynamite there to keep off the bugs, and a careless stroke may send him, all too soon, where he deserves to go.

By following these hints you may succeed in knowing your flowers when they bloom.

Franklin, Va.

W. WOODSON WALKER.

* *

CURRENT NOTES.

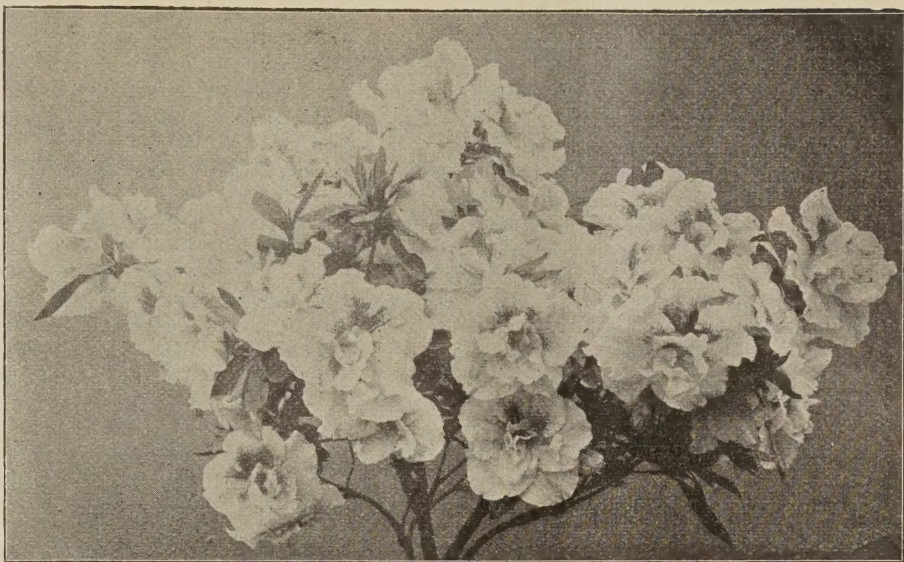
BEGONIA GLOIRE DE LORRAINE is said to be a cross between B. socotrana and B. Dregei. It is one of the finest of all the winter blooming begonias.

VIOLETS are no longer compared in size to a silver dollar. Our friend Scott, the celebrated Buffalo florist, is responsible for assuring us that they are now grown as large as a "piece of chalk."

SUGAR BEETS IN OHIO—The results of sugar beet growing in Ohio, in 1897 and 1898, do not decide the question of profitable cultivation for sugar. Trials are to be continued this year.

STOCK FOR GRAFTING TEA ROSES—A plant-grower of many years experience, Mr. F. A. Boller, of Springfield, Illinois, advises the use of the White Banksia rose as a stock for grafting tea roses intended for forcing, claiming that it is superior for this purpose to the Manetti, and gives good reasons for his opinion, and offers examples of Marechal Neil and Gloire de Dijon in his own houses. "I never saw such roses, nor so many of them, produced from plants on own roots, as are produced from those on this stock. If every florist carried a few old, well-established plants in any out-of-the-way place in his establishment, they would prove in their season a small gold mine."

CARNATION, MRS. THOMAS W. LAWSON—The wild stories told in the



AZALEA
MADAME MASSON

newspapers about the sale of this carnation for \$30,000 to Mr. Thomas W. Lawson, the husband of the Boston lady for whom it was named, have turned out to be absolutely false, as no such sale, nor any sale of it, has been made. Mr. Peter Fisher, the originator of it says that the plants will be put on the market in the spring of 1900. The new seedling is described as follows: "Color, dark pink; flowers of great size, borne on exceedingly long and strong stems, with an excellent calyx; vigorous growth, and a free and early bloomer." The newspaper accounts have served to give the new seedling great notoriety. It is, no doubt, a good variety; how much, if any, better than some already in cultivation we may know later.

ACALYPHA HISPIDA—Quoting from a correspondent, R. D. of the *Gardeners' Chronicle*: "The persistency with which *Acalypha hispida* produces its long, cord-like inflorescences is one of the prime features of this plant. I have just seen the group of plants Mr. J. Hudson exhibited some weeks ago; a number of plants, and, excepting that some of the handsome drooping spikes are losing their freshness, none has been removed, and as the plants grow taller they produce fresh flower-spikes from every leaf-axil. It would thus appear that so long as the plant is kept in a growing state, so long will the inflorescence be produced. Mr. Hudson speaks very highly of it as a house-plant. Mr. Hudson's intention is to convert some of his strongest plants into standards. With this object in view, he will shortly behead some of them, give them a brief rest, and then start them into growth, so as to form branching heads. The capacity of the plant to stand this has, of course, to be proved, but it would appear there is ground to hope it will be abundantly realized." It is found that a night temperature of 50° to 60°, and a day temperature of 65° to 70° in winter is most suitable. A good light is necessary to

to develop the color. The plants should not be syringed overhead as it is apt to disfigure the inflorescence, but it is a good practice to sponge the leaves occasionally, both upper and under surfaces, to free them from dust and insects. A mixture of turfy loam, leaf-mould and sand make a proper compost for it.

EARTHWORMS IN POTS—*Revue Horticole* derives from another journal the following method given by a correspondent: "Crush eight horse-chestnuts and place in a quart (litre) of water, and allow to stand twenty-four hours. Water the plants freely with this liquid, so that the whole body of soil should be saturated, in order that the worms may be reached. The worms will soon come to the surface and perish." If not mistaken, the substance of this recipe was once published in the pages of a former number of this journal.

* *

AS FOR marigolds, poppies, hollyhocks, and valorous sunflowers, we shall never have a garden without them, both for their own sake, and for the sake of old-fashioned folks, who used to love them.—Henry Ward Beecher.



ANTHURIUM CRYSTALLINUM

SELECT CANNAS.*

The named varieties of all kinds which have now been sent out number into the hundreds. To retain them all has become burdensome to the grower and dealer, and troublesome to the purchaser. To help remedy these difficulties the lists of all the principal growers and dealers in this country have been examined, and a selection has been made of thirty-three varieties which appear to possess the most desirable qualities. This list, it is believed, will bear careful scrutiny. Another year's trial may show that it is possible to reduce the number. For the sake of convenience the list is arranged in four sections, according to the colors of the flowers:

1. Those having crimson, scarlet, vermilion and other shades of red. This section contains sixteen varieties.
2. Shades of red—gold banded. Nine varieties.
3. Yellow or orange. Four varieties.
4. Yellow spotted. Four varieties.

LARGE-FLOWERED, DWARF OR CROZY CANNAS.

SECTION 1.

CRIMSON, SCARLET, VERMILION AND OTHER SHADES OF RED.

Beaute Poitevine—Four feet; green foliage; flowers bright crimson and produced in great numbers; delights in hot, dry weather.

Chicago—Four and one-half feet; green foliage, vermilion scarlet; very large flowers.

Chas. Henderson—Three and one-half feet; green foliage, crimson.

Columbia—Four feet; green foliage, rich, cardinal red.

Egandale—Four to five feet; bronze foliage, currant or cherry red. One of the best bronze-leaved varieties.

F. R. Pierson—Four feet; green foliage; intense scarlet with a little touch of yellow at center.

Hortense Barbereau—Three and one-half feet; green foliage; flowers large, bright cherry red.

Inglewood—Five feet; dark bronze foliage; clear vermilion flowers of largest size.

Leonard Vaughan—Five feet; dark bronze, bright scarlet flowers of the largest size.

Menekle—Four feet; green foliage; flowers a rich red and of very large size.

Mademoiselle Berat—Three and one-half to five feet; green foliage; soft shade of rosy carmine or nearly pink.

Philadelphia—Four feet; green foliage; bright crimson; free and continuous bloomer.

President Cleveland—Four feet; green foliage; bright orange scarlet.

President McKinley—Three to four feet; foliage green with chocolate margin; brilliant crimson with scarlet shadings.

Tarrytown—Four feet; dark green foliage; brilliant cherry red; remarkably free bloomer.

Triumph—Three and one-half feet; green foliage; flowers large, bright red; a constant bloomer.



TUBEROSE BULB
AS SENT OUT BY THE DEALER



TUBEROSE BULB
PREPARED FOR PLANTING

SECTION 2.

SHADES OF RED—GOLD BANDED.

Gloriosa—Two feet; green foliage; scarlet crimson, gold band with crimson dots reaching out on the band; flowers large and borne in large trusses.

*Extract from the Report on "Flowers and Bedding Plants," by Charles W. Seelye, made at the meeting of the Western New York Horticultural Society, January, 1899.

Lorraine—Four feet; green foliage; pink, edged with sulphur yellow changing to white.

Mrs. Fairman Rogers—Three feet; foliage green; similar to Madame Crozy, but said to surpass it in all points—more vigorous in growth and with larger flowers which are deeper in color, and with a richer golden band.

Madame Crozy—Four feet; green foliage; bright crimson scarlet, bordered with golden yellow; always in bloom.

M. Mesnier—Four feet; green foliage; salmon dotted and streaked with red, and with a narrow yellow border; flowers large; free bloomer.

Pierson's Premier—Three and one-half feet; green foliage; intense scarlet with broad, golden-yellow edge.

Queen Charlotte—Three to four feet; bluish green foliage; rich scarlet crimson with a broad gold band; very free bloomer.

Sam Trelease—Three feet; green foliage; almost pure scarlet edged with yellow, and yellow marks at the center; flower large and open; blooms freely.

Souvenir d'Antoine Crozy—Four feet; green foliage; rich crimson scarlet, bordered with a rich golden band; flowers large; an early and continuous bloomer.

SECTION 3.

YELLOW OR ORANGE.

J. D. Cabos—Four to five feet; foliage deep purplish bronze; bright orange or apricot color.

M. François Gos—Three and one-half feet; green foliage; pure orange.

Secrétaire Chabanne—Four feet; foliage green; rich salmon; very fine in all respects.

Yellow Crozy—Three and one-half feet; foliage green; clear canary yellow and does not fade in the sun.

SECTION 4.

YELLOW SPOTTED.

Comtesse de Sartoux Thorene—Two and one-half to three feet; green foliage rich, golden yellow, spotted with bright red; it has been called a dwarf Florence Vaughan.

Eldorado—Four to four and one-half feet; foliage green; yellow, lightly spotted with orange which serves to heighten the color, making it appear a solid, clear yellow at a short distance.

Florence Vaughan—Five feet; green foliage; flowers very large, brilliant yellow,

spotted with scarlet; the standard of this section.

Vice-President David—Four feet; foliage green; flowers extra large, yellow mottled heavily with crimson.

Any new variety of canna hereafter introduced should have qualities superior to some corresponding variety in this list to entitle it to a select place.

PREPARING TUBEROSE BULBS FOR PLANTING.

The engravings on this page leave little to be said in connection with them. One of them shows a bulb as it appears when sent out by the dealer, the other, after it is prepared for planting. The preparation consists in cutting away, close up to the base of the bulb, the solid, fleshy root-stock, and also in removing all the little offsets which have commenced their growth about the lower portion of the bulb. By removing offsets the strength of the roots will go into the main stem, and not be partially diverted, as would be the case if they should be left on. The removal of the solid root-stock favors greatly the emission of roots from the base of the bulb; it is highly desirable that this should be done as time saved in making roots shortens the time from planting to bloom.

FATSIA JAPONICA VARIEGATA.

THIS plant is more commonly known in the trade as *Aralia Sieboldii* variegata. There is a slight botanical difference between the *Aralias* and *Fatsias*, although formerly the latter were included with the *Aralias*. There are three known species of *Fatsia*.

F. horrida, so called on account of the numerous yellow spines on the stem and branches, is a native of the northwestern part of this continent. It is also known under the name of *Panax horridum*.

F. papyrifera is said to be originally a native of the island of Formosa and is the plant from which the rice paper is made. "It is said to attain its full size in less than a year, when the stems are cut down and left to soak in running water for several days to loosen the bark. Then the cylindrical mass of pith is removed, cut into lengths and revolved against the edge of a sharp knife, which cuts it into a thin, even sheet."

F. Japonica, as its name indicates is of Japan origin. It has large, leathery green leaves, which are digitately lobed. It bears small whitish flowers in umbellate panicles. There are three varieties, besides the species, in cultivation; these are *variegata*, with white margins and blotches, and of which an engraving is here presented; variety *reticulata* has golden yellow veins; *variegata aurea* has stripes and blotches of a rich yellow shade. These plants are raised to some extent for greenhouse and indoor decoration and window plants, and may also be employed in beds in the open ground in summer with the so-called sub-tropical plants.

The subject of this sketch when of medium size, is a very desirable table plant. With its fine form and handsome foliage it makes a very pleasing appearance. The plants are propagated by cuttings of the stem or roots placed in bottom heat. A sandy loam with some leaf mould and sand is a suitable soil for them.

* *

DAHLIAS FOR EXHIBITIONS.

Some of the readers of these pages who admire and raise dahlias will want to compete for prizes offered for these flowers at the fairs and horticultural shows next autumn. It will be well to think of this subject now, and to take every step towards it advisedly and thus ensure a capture of one or more of the prizes. First, we want to know what to prepare to compete for, and then go about the work systematically.

Examining the "Schedule of Prizes" offered by the Massachusetts Horticultural society for the present year it is seen that separate prizes are offered for dahlias in the following classes: "Show, Fancy, Cactus, Decorative, Pompon and Single, as also for a general display, and for the best single-bloom, of any class, introduction of 1897, or later. Two prizes are offered for show dahlias, eighteen blooms, named varieties; Fancy, eighteen blooms, named varieties, two prizes; Cactus, twelve blooms, named varieties, three prizes; Decorative, twelve blooms, named varieties, three prizes; Show, six blooms named varieties, two prizes; Fancy, six blooms, named varieties, two prizes; Pompon, twelve vases of three blooms each, named varieties, three prizes; Single, twelve vases of three blooms each, named varieties, two prizes; general display, five prizes. The classes are defined as follows:

Show—This section includes all large self-colored flowers, and all having a light ground, tipped with darker shades.

Fancy—All striped, large flowered varieties, and also those in which the petals are tipped light on a darker ground.

Cactus—Characterized by the long, pointed, somewhat revolute petals.

Decorative—All loose flowered kinds that do not properly come in the Show, Fancy or Cactus classes.

Pompon or Liliputian—All small flowered forms of the Show and Fancy type, but not exceeding one and one-half inches in diameter.

Here we have information sufficiently explicit to guide us in a selection of varieties. The premiums offered by the various agricultural societies may not be so full as the above, but undoubtedly they will pur-

sue much the same line. The first thing to take notice of here is that the flowers are to be named varieties. It is hopeless for anyone to offer unnamed flowers for exhibition. All flowers must be labeled, and labeled correctly, or they will be thrown out by the judges, as they should be.

Now a few words about management: The soil should be rich to secure good growth of the plants, as only such plants can produce well developed flowers. The only exception to be made to this statement is in relation to the Pompons; a soil of moderate fertility is best and without manuring the season of planting, as large flowers of this class are not desired. But for all others have the soil well enriched, either by general manuring or manuring in the hill, just before planting.

The plants which have been started in boxes or pots must not be turned out until there is a reasonable assurance of absence of frost, and then after planting watch carefully that frost may not catch them, after all, and be prepared to give protection if necessary. Give a good watering to each plant at the time of setting. Watch for slugs and cut worms and destroy them with poisoned bait if found to be present. Keep down green fly or other insects by syringing with water, or with insecticides if necessary. Have stakes ready when planting out and place one beside each plant. It is much better to set the stakes at once, and thus avoid injuring the roots by driving them down when the roots have filled the ground. As the plants grow and begin to form buds attention must be given to thinning them, on all the plants of the Show, Fancy, Decorative

and Cactus classes, limiting the number of bloom so as to secure a few that will be large and fine. Plants of the Pompon class may be allowed to bloom without restriction, for small flowers only are wanted. Stir the ground frequently and keep it fine and mellow at the surface. Watering in case of dry weather is essential. If it is found that insects are injuring the buds these should be protected by tying over them a piece of tarlatan or mosquito netting.

Flowers to be selected for exhibition should be shaded by means of a cap of some kind, for a week or ten days before cutting.

The above are some of the principal points needing attention by the dahlia grower who intends to exhibit, and it is well that all such should bear them in mind and give them attention.

* *

*Aralia Sieboldii*JAPAN ARALIA
FATSIA JAPONICA VARIEGATA

HEALTHY POTATOES.

Potato growers who want to have potatoes with bright clean skins, free from scab, should not neglect to use the necessary precautions to have them so. First, plant on new soil, or that not already infested with the scab fungus, for it is proved that the fungus lives in the soil for a year or two. Planting should be done where some other crop than the potato has been grown for two years previous. Second, having washed the seed potatoes, immerse them in a solution of corrosive sublimate in order to kill any scab fungus on the tubers. Use two and a quarter ounces of corrosive sublimate in fifteen gallons of water. Dissolve the corrosive sublimate in two gallons of hot water, and then add thirteen gallons more of water. Use a large tub or a barrel; metallic vessels will be corroded by the liquid. Place the potatoes to be treated in a large, coarse sack and sink it into the liquid, allowing it to remain an hour and a half; at the end of that time lift them out and turn them out on a floor to dry, when they can be cut up and planted. The sack of potatoes can be conveniently handled, in lifting it in and out of the barrel, by means of a lever on a post near the barrel, sufficiently high to work easily, something like an old-fashioned well sweep, and which anyone can easily and quickly rig up. This will be necessary only when a considerable quantity of potatoes are to be treated. As the corrosive mixture is poisonous, care should be taken not to touch it to the hands, especially if the skin is broken; also, to keep the treated tubers away from poultry or cattle.

VICKS ILLUSTRATED MONTHLY... MAGAZINE

ROCHESTER, N. Y., MARCH, 1899.

Entered in the postoffice at Rochester, N. Y., as second class mail matter.

CHARLES W. SEELYE, Editor.

ELIAS A. LONG, Associate.

Formerly conductor of *Popular Gardening*

Publishers are invited to use any articles contained in this number, if proper credit is given.

VICKS ILLUSTRATED MONTHLY MAGAZINE is published at the following rates, either for old or new subscribers; these rates include postage:

One copy, one year, in advance, Fifty cents. One copy for twenty-seven months (two and one-fourth years), full advance payment, One dollar.

A CLUB of five or more copies sent at one time, Forty cents each, without premiums. Neighbors can join in this plan.

FREE COPIES. One free copy additional will be allowed to each club of ten (in addition to all other premiums and offers) if spoken of when club is sent.

All contributions, subscriptions and orders for advertising should be sent to VICK PUBLISHING CO., ROCHESTER, N. Y.

Hints for March.

The cares of the garden begin to multiply with the coming in of March. The severe weather of the past month has visited very rudely the gardens and plantations of the South, and very active work will now be needed to put in crops in the place of those destroyed by the frosts or belated by cold—especially so in the southern portions of the Gulf States. Nearly all kinds of vegetables can be put in during the month, the time for the different kinds varying with latitude and locality, and the same is true of most kinds of flower seeds of annuals.

At the North seed-sowing of vegetables will be mostly confined to the hotbed—cabbage, cauliflower and celery—to be hardened off in April and set for an early crop. Sowings of lettuce and radish can be made in hotbeds. If the weather should be suitable and the soil sufficiently dry to work, peas can be planted the latter part of the month, especially the smooth, early variety.

Under the same conditions asparagus seed can be sown; these should be got in as early as possible, as they are long in germinating, and the plants should have as long a season as possible for growing. Not much can be done, ordinarily this month, in the way of seed-sowing at the North, but seasons vary, and it sometimes happens that the last half of March is extremely favorable for fitting land and putting in early crops. Of course, onion seed should be sown as soon as the preparation for it can be made. Seed should be sown in hotbeds for onions which are intended to be transplanted.

In the open it may be possible to plant sweet peas which, of course, should be done at the earliest favorable opportunity. But the starting of flower seeds this month will be mostly confined to the greenhouse, windowframe and hotbed; these, as mentioned last month, may be *ageratum*, *abutilon*, *begonia*, *centaurea*, *cineraria*, *calceolaria*, Chinese pinks, *coleus*, *cyclamen*, forget-me-not, *gloxinia*, *grevillea*, *gypsophila*, *heliotrope*, *lantana*, *oleander*, *pansy*, *perilla*, *salvia*, *smilax*, *solanum*, *thunbergia* and *verbena*. To this list it may be best now to add seeds of ten weeks stock, *Phlox Drummondii*, *nicotiana*, sweet William, *cobaea*, moonflower, *canna*, *aquilegia*, and perennial *chrysanthemums*, although the sowing of any of these may be deferred until next month, and then be made in the cold-frame. This month is favorable to starting cuttings of many kinds of flowering plants; *chrysanthemums* better be started now, either from cuttings or root divisions.

BULBS.—Bulbs which have flowered in pots can be cared for until the growth is complete, and then kept comparatively dry until they can be turned into the garden border; tulips, hyacinths, narcissus, etc., grown in pots, should not be employed again in this way. *Amaryllis* and *crinum* bulbs, which have been resting, can be repotted in fresh soil and started. *Agapanthus* can be encouraged to grow, and *tuberose*, *caladium* and *canna* tubers started.

CACTUS plants will be inclined to start, and should be given a warm, sunny place and be supplied with water.

PLANNING THE GARDEN.—All plans for the season's work should be completed and written out in a small book in which a complete garden record is kept.

.

Lily.--Name Corrected.

By that perversity of cold type which will sometimes show itself, notwithstanding all the cares of the proof-reader, in the notice of a "New Hardy Lily," page 53, of our last issue, the specific name of the lily was given as "umbellum," instead of "rubellum" as it should have been. The name *rubellum*, meaning reddish, is evidently intended as descriptive of the flowers, which vary from a deep pink to a deep rose.

Annual Flowers.

This is the title of Bulletin 161 of the Cornell University Experiment Station, recently issued, by G. N. Lauman and L. H. Bailey. This publication of 32 pages, consists of two parts, the first being eight pages of instructions, with illustrations, about making a flower garden and how to sow seeds and care for the plants; the remainder is occupied with tables showing when the plants come into bloom, the length of the blooming season, the height and habit of plants and color of flowers, and general remarks concerning them. The object of the publication appears to be mainly for the purpose of encouraging the desire to beautify the home surroundings. In his general remarks, Mr. Bailey says: "Farm homes are not often designed to afford the greatest pleasure and comfort of living. Every person should know the great fact that the most successful life is the happiest one, and that the happiest one is that in which the common and little things awaken the greatest number of mental impressions. Successful and enjoyable farming, therefore, depends largely upon one's attitude of mind toward the things with which he deals and lives. If one derives pleasure from a daisy, a hill of potatoes, and a pig-weed, then each of these plants is practical and worth the growing. Like or dislike of the farm is often, and probably generally, formed before the child is old enough to be influenced by the profit-and-loss side of farming. A pleasant and happy home is the very first means of keeping the boy on the farm. One means of making the home attractive is to brighten the place with flowers." Flowers are noticed in their relation to the lawn and to the shrubbery, and the general features and treatment of a flower garden are briefly mentioned. Under the caption of "A Word With the Boys and Girls," there is an encouraging word to the children to make a flower garden by sowing seeds of annuals; one of the best parts of it relates to saving the moisture in the soil: "Let me tell you how to water the plants. I wonder if you have a watering pot? If you have, put it where you cannot find it, for we are going to water this garden with a rake! We want you to learn in this little garden, the first great lesson in farming—how to save the water in the soil. If you learn that much next summer, you will know more than many old farmers do. You know that the soil is moist in the spring when you plant the seeds. Where does this moisture go to? It dries up—goes off into the air. If we could cover the soil with something, we should prevent the moisture from drying up. Let us cover it with a layer of loose dry earth! We shall make this covering by raking the bed every few days,—once every week anyway, and oftener than that if the top of the soil becomes hard and crusty, as it does after a rain. Instead of pouring water on the bed, therefore, we shall keep the moisture in the bed.

"If, however, the soil becomes so dry in spite of you that the plants do not thrive, then water the bed. Do not sprinkle it but water it. Wet it clean through at evening. Then in the morning, when the surface begins to dry, begin the raking again to keep the water from getting away. Sprinkling the plants every day or two is one of the surest ways to spoil them." No details of the cultivation of plants is given, but the reader is referred for such instructions to "the catalogues of the leading seedsmen." The second part of the Bulletin, or that consisting of the tables that have been referred to, "is designed more for the use of florists and those who make a special study of flower growing." The Bulletin can be obtained on application to the station at Ithaca, N. Y.

.

Gardening and Old Age.

The numerous testimonials that have been given, both by ancient and modern writers, leave no doubt that gardening is conducive to physical health, and serenity of mind. Both of these conditions are favorable to long life. If our readers could see the many congratulatory letters received this season by James Vicks Sons, from quite old people, who retain the love of flowers to their latest age, they would agree with us that the famous saying of Grant, in reference to office holders in the civil service class, "they seldom die and never resign," is equally true of garden and flower lovers.

.

Soil for Forcing Lettuce.

Bulletin No. 146 of the New York Agricultural Experiment Station (Geneva), gives results of tests of various soil mixtures in forcing head lettuce. Compact soils rather than sandy, loose-textured loam, seemed to give best results. Stable manure gave best results upon heavy soils; commercial fertilizers on light soils; but there was little gain from combining the two. The bulletin will be sent free to anyone applying to the Station.

.

NEW YORK STATE ENTOMOLOGIST—Dr. E. P. Felt, who was the assistant of Dr. Lintner, at the time of his death, has been appointed as his successor. From what is known of Dr. Felt and his qualifications there is no doubt of his filling the position with ability.

Letter Box.

In this department we shall be pleased to answer any questions relating to Flowers, Vegetables and Plants, and to publish the experiences of our readers.

EDITORS.

Violets in the House.

Will you kindly inform methrough the columns of your MAGAZINE at as early a date as possible the best way of treating English double violets in the house.

Bedford, N. S.

A. M. C.

Give them an east window, and keep in a low temperature—45° to 55°. Water the soil, and not pour water on the plants. The air in the house is usually too hot and too dry.

++

Monthly Roses—Mystery and Rex Begonias.

1.—We are very fond of Monthly roses and have tried several times to have some, but do not seem to be successful.

2.—We had a Mystery Begonia and treated it like a Rex, but it died. Will you please answer these two in the next number of the MAGAZINE.

Watertown, Mass.

H. S. W.

1.—In a cold climate, and without a greenhouse, greater success will be attained by employing the more hardy kinds of roses, such as the Hybrid Perpetuals, the hardiest of the hybrid teas, and the Polyanthas. A near approach to tea roses in hardy varieties is seen in Clotilde Soupert and Pink Soupert, crosses of tea and Polyanthas. They are so hardy that they can be wintered outside in our climate with a fair amount of protection.

2.—The Rex begonia and all of that class succeed best in the greenhouse, but now and then a fine plant of this kind is seen in the hands of an amateur, who has only a window in winter and a veranda in summer. Very much depends on careful attention learned by experience.

++

Twelve Hardy Roses.—Spiræa arguta.

1.—Would you kindly answer through your MAGAZINE what you consider the most hardy dozen roses of different colors to make a show in a small garden where the winters are long and severe, with plenty of freezing or thawing both fall and spring?

2.—If Spiræa arguta, mentioned in MAGAZINE of November '97, has proved as good as supposed at time of writing about it? I, for one, am very sorry our government has debarred us from all trees and shrubs from the United States. It seems to me, they might admit from nurseries where it is certified that no San Jose scale exists; the next member that comes my way looking for a vote I think I shall make that a stipulation, that he try to have it done.

One reason why I like Vick's Floral Guide is, it doesn't make everything appear too good, but describes everything about what one might expect by suitable treatment.

W. F. M.

Five Islands, N. S.

1.—Hybrid Perpetuals—Anna de Diesbach, General Jacqueminot, La Reine, Mrs. John Laing, Marshall P. Wilder, Magna Charta, Margaret Dickson, Paul Neyron, Prince Camille de Rohan. Hybrid China—Madame Plantier. Climbing Polyantha—Crimson Rambler. Dwarf Polyantha—Little White Pet.

2.—Spiræa arguta is one of the best of this class of plants; it fully supports all that has been said of it.

++

A Small Greenhouse.

In the "Letter Box" of the February number of your paper I was interested in your answer to R. W., Truro, N. S., regarding a small greenhouse. I would like you to answer, if convenient, the following questions regarding such a building.

1.—What height should such a house be from ground to ridge-pole?

2.—What would be the probable expense of such a house with heating apparatus, with and without the wooden extension.

E. S. B.

Springfield, Mass.

1.—The height to the top of the ridge, in this case, should be 8 feet, the sides being 4 feet 6 inches.

2.—Greenhouse alone:

Lumber and nails	\$15 00
Glass	5 00
Labor of construction	15 00
Paint and painting	5 00
	—\$40 00

Wooden extension, without a cellar, lumber . . . \$10 00

Labor 5 00

Heater and pipes 15 00

20 00

Total \$75 00

In the directions in the February number, the glass was mentioned as 12x16 inches, or 12x18 inches, but the length of sash-bar in the roof of this small house is so short that glass 12x14 inches would be best. There can be three pairs of rafters, one at each end and one in the middle—these should be 2x4 inches, and of pine. The 2x4 scantling used for frame-work can be hemlock, and all the rest of the lumber pine, and the roof of the extension to be made of planed and matched boards. Door or doors to be made of planed and matched pine and battened.

Aspidistra—Sweet Pea Shrub—Daphne Cneorum—Olea fragrans.

1.—I am very much pleased with Aspidistra variegata, if I could only keep the brown spots from coming on the white stripes. I do not wet the foliage and then let the sun strike it, but it looks like it. Can any one tell me what is the trouble? My plant has but three leaves or excuses for leaves. Is there any hope for it outgrowing the brown spots or streaks?

2.—Is the sweet pea shrub of any great value as a new shrub. Is it worthy of a place where room is scarce? I have room for only good things.

3.—I am so well pleased with Daphne Cneorum I wish every one would try a plant. I would like to know how to propagate it?

My favorite house plant is Fragrant Olive, Olea fragrans. Few people notice the plant, but few fail to ask what is so sweet. It requires so little care and is so clean, I would not do without mine.

V. P. L.

1.—It is not a habit of Aspidistra variegata to show brown spots on the white portion of the leaf, and when it does so, it is on account of some peculiar circumstance attending the plant. It may not be that water is allowed to stand on the leaf in the sunshine, but something is wrong in the treatment, and it may be that the plant is not given sufficient water. It needs a good soaking every day.

2.—The Flowering Pea Bush (Desmodium penduliflorum), which we suppose is referred to, is a very beautiful shrub, and particularly valuable on account of its habit of blooming late in the season. If room is scarce, as suggested, earlier blooming shrubs may be thought more desirable.

3.—Daphne Cneorum is propagated by layering the branches in summer.

++

Ipomœa.—Calla.—Lilacs.

1.—How should Ipomœa pandurata be treated to ensure growth? Two bulbs have failed us—one in a pot, the other in the open ground.

2.—Do calla bulbs ever become too old to blossom freely?

3.—I would like to have a more detailed description of Lilac Rothmagensis rubra and President Grevy. The lilac deserves more attention than it receives at the hands of florists. We want to know about the improvements.

Windfall, O.

MRS. G. H.

1.—Plant the tubers in the open ground. The plant is quite hardy and vigorous—grows freely.

2.—Yes.

3.—Lilac Rothmagensis rubra is the Rouen lilac and was found among some seedlings in the Botanic Garden at Rouen, France, some authorities stating that it was presumably from a seed of Syringa vulgaris supposed to be cross fertilized by S. Persica; others say that it was found among seedlings of S. Persica. As a matter of fact the plant agrees in all particulars with Syringa Chimensis. But good judges consider the latter to be the result of a cross between S. Persica and S. vulgaris, the common lilac; and, again, the common lilac is supposed to be only a variety of S. Persica. These various opinions may never be confirmed or reconciled. But the fact of most interest is that this variety is a very fine and distinct one, with reddish flowers, borne in very large panicles, which are abundantly produced. The plant is comparatively of low and open growth, with medium-sized smooth leaves. Considered one of the best varieties.

President Grevy is a variety of the common lilac with large, dense trusses of double flowers, of a beautiful blue color. The panicles will often measure eleven inches in length and five inches across. This is one of the handsomest and most desirable kinds. There are now many varieties of the lilac, and where one has the garden space sufficient, no shrubs can be more beautiful and interesting in their season of bloom than a collection of a dozen or more of the best kinds of lilac.

++

Arrangement of Shrubs—Moles.

I have often profited from answers given in your Letter Box and now take the liberty to come with some questions of my own. My case is this: We intend to build on a hillside, which runs north and south—facing east. I want to remove shrubs and ornamental plants from our old home to the slope of the hill in the spring. Now I would like to know, how the plants had best be placed, which higher, which lower down, and how grouped for best effect. I have one each of purple fringe, white fringe, flowering crab, Japan snowball, Spiræa Van Houttei, Spiræa Reevesii, Eleagnus longipes, exochordia, golden elder, calico bush, kerria, Hypericum Moserianum, upright honeysuckle, several Deutzia gracilis, weigela, calycanthus, common snowball, white and purple lilacs, forsythia, flowering almond, rhododendron, Spiræa Billardi. They are all young plants, two and three years old. I also have herbaceous peonies, lilies spe. rubrum, auratum and candidum, German and Japan iris, coreopsis, yellow day lily and funkia, rudbeckia, dicentra, many lily of the valley and double sweet violets. Would it be well to plant any of these among the shrubs or to make a border along the side of the lot? The place is about two hundred feet from north to south boundary and slopes gently perhaps thirty feet. The land is old pasture ground. I bought Prof. Bailey's "Garden Making," but I do not get enough help to feel confident of arranging to greatest advantage. If you can give me any hints in regard to the matter such advice will be most gratefully received.

If the writer, N. A. M., (in January VICKS MAGAZINE) tries kerosene, I think she may drive away the moles. I saturated old pieces of woolen rags with the kerosene and placed one or two in the bulb beds, being careful to get them into the runs of the moles and have not been troubled with the little pests since.

Miss M. S.

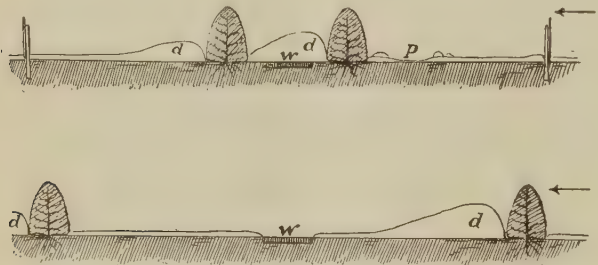
Only some general ideas can be given in relation to shrub arrangement. The first thing to be considered is the lawn. This should be preserved unbroken as far as possible. With this purpose in view the

shrubs should mostly occupy the margin of the grounds. At the same time it is quite proper to place one of suitable form, or a group, at the inner side of a curve of the walk, or at any of the inner angles of the buildings. If there is a driveway from the front, as well as a walk, there will be opportunities to use some shrubs at some point or points along the line. Groups of shrubs might be placed near and on each side. Shrubs planted singly should mostly be those of erect habit and clean, handsome foliage. The purple fringe, white fringe, flowering crab, Japan quince, *Eleagnus longipes* and upright honeysuckle may all be used in this way, if desired. In the border, the lower growing kinds should be planted in front of the taller ones, always aiming to make pleasing combinations at blooming time, either by the blooming of two or more kinds of harmonious colors at the same time, or else by enhancing the appearance of those in front with suitable backgrounds in the rear line. The grouping of shrubs is a fine art and too little attention is given to it, even by those who should be adepts. Our advice is, in this case, that a diagram of the ground be made to a scale—say one foot to an inch. On this diagram arrange the shrubs as desired, before attempting to plant. Make a study of it for the next six weeks, and arrange it and re-arrange it until a satisfactory disposition is made for the whole. Large growing shrubs will need to stand six to eight feet apart, and smaller ones from three to five feet. Three or four feet in width of border in front of the shrubs will be a fitting place for perennials and annuals.

* *

EVERGREEN HEDGES IN AND OUT OF PLACE. SNOWDRIFTS.

RECENTLY the writer came across so lamentable an instance of the planting of evergreen hedges in the wrong place that he mentally expressed the hope that it was the only case of the kind to be found; and he had a further desire to make mention of this case in the columns of your widely circulating journal in order that others may avoid similar mistakes. In his own mind, the writer fears that other cases of the same kind do exist, the unfortunate part of which is, that in such instances the seriousness of the defect may not be noticed until some years after the lines are planted, and the trees are well established, so that it seems too great a sacrifice to disturb them, and the fault continues.



EVERGREEN HEDGES IN AND OUT OF PLACE.

Arrows indicate course of prevailing winds, w walks, d snowdrifts, p snow path.

The nature of the case referred to is this: The dwelling stands about 200 feet back from the highway, with which it is connected by a straight walk. On each side of this front walk, and with the two lines about fifteen feet apart, are situated the hedges of Norway spruce mentioned. The seriousness of this arrangement was plainly manifest when the writer passed along the street in front of the house, and which he has endeavored to show in the upper sketch accompanying. There had been a snow storm some time previous, with the result that a large drift had found lodgment on the walk from end to end between the two hedge rows. There was another drift outside of the hedges to the leeward. Rather than to clear the walk by shovelling snow over the hedge—a big task—the regular walks had been deserted for the time, and a walk tracked through the snow, to the right, or windward, of the hedges, at *p* in the engraving.

A further result of this, was that the new walk, made where there was less snow, was, nevertheless, on the side of the hedges toward the prevailing winds, so that persons passing to and fro between the street and the house in a cold wind, had not a particle of protection from the evergreens which, no doubt, had been planted as protection in winter. Clearly a great mistake had been made, when the hedge served to block the sheltered walk with deep snow, causing the pedestrians to walk on the side of the hedge exposed to bleak winds.

In the lower cross sketch of the figure, the right place to have planted the hedges is indicated, namely, at the extreme right and left of the front lot boundary, in case two lines were wanted. Here it is seen, that the hedge, instead of piling snow on the walk where not wanted, by its distance from the walk deposits the drift between it and the walk. This

would be the case whether the storm came from the usual direction or across the opposite hedge. In the instance shown at the top, the walk would be likely to be covered with a snow bank, as shown, in either case.

It is also to be noticed, that with having the hedges as indicated in the lower cut, they would respectively serve to break the wind—just as one designs evergreen hedges in the winter to do—while at the same time they prevent the drifting of snow on the walk. It is seen, therefore, that by this arrangement every disadvantage of the case alluded to is avoided, while the advantages that should accrue from hedges as a source of winter protection are gained.

The obvious lesson to be drawn is this: Let no planting be done without thought as to the ultimate effects of the work, remembering that the task of a day or week will, if successful, be permanent in its results. But especially aim so to arrange everything planted that it shall prove a continual blessing, and not an aggravation.

* *

SEEDLING PLANTS FOR BEDDING.

Those having in charge large grounds, where a considerable amount of summer bedding is done, or those who wish to have a supply of plants at the least expense, should not neglect the use of seedling plants which can be raised cheaply and in unlimited quantities. Among the most satisfactory and showy plants for this purpose, and which bloom through a long season, may be mentioned:

ALYSSUM, SWEET.—The common well-known kind that everyone admires, and, also, the variety *Benthami compactum* or *Little Gem*, which grows only six inches in height; and the variety *Carpet of Snow* growing only two or three inches high, and blooming profusely. All of them pure white and very fragrant.

CALENDULA.—The varieties *Meteor* and *Prince of Orange* can be well employed in bedding, being dwarf, of fine colors, and free bloomers.

GAILLARDIA.—The varieties *Lorenziana* and *Aurora* are showy plants and constant bloomers.

GODETIA.—These plants have large showy flowers, produced freely and constantly. *Gloriosa*, with brilliant, deep blood-red flowers and *The Bride*, white with blush spots, are two of the best varieties and used together form a handsome bed.

PETUNIA.—The merits of this plant are so well known as to need no mention. The vigor of the plants, their great freedom and constancy of bloom, and the variety of colors, give it great importance as a showy bedder, or grown in masses.

PHLOX DRUMMONDII.—This is a universal favorite and no other plant can excel it in giving life and brilliancy to the garden. The many colors it can be produced in, allows of its use largely for bedding.

PORTULACA.—Low-growing plants with brilliantly colored flowers of numerous varieties, and blooming all the season, and delighting in the warmest places and brightest sunshine. Either the single or double flowered varieties are excellent bedders, the double ones being like little double roses.

VERBENA.—This, though a perennial, is freely raised from seeds, and these, if sown early, will make plants suitable for bedding the last of May or first of June, which will soon commence to bloom in great profusion, and so continue through the season.

VINCA ROSEA.—This is another perennial, which can be freely produced from seeds, and is one of the best of bedding plants, as also its white variety, and white with a red eye. Particulars in regard to raising this plant will be found elsewhere in our pages this month.

All these plants, to ensure early bloom, should have the seeds sown early to obtain strong plants for transplanting in the open ground as soon as the season admits. Although attention is now called especially to their fitness for bedding, it is supposed to be understood that they are eminently desirable to grow in masses in borders, and along the front edge of the shrubbery.

* *

THE WESTERN NEW YORK HORTICULTURAL SOCIETY.

This Society held its annual meeting in this city on the 25th and 26th days of January last. On account of the illness of the President, William C. Barry, of Rochester, the chair was occupied by Vice-President L. D. Willard, of Geneva, N. Y., who discharged the duties of the position with great ability and efficiency. There were three sessions on the first day, morning, afternoon, and evening, and two the second day, closing at 6 P. M. The keenest interest was manifested by the membership throughout the whole meeting, and the attendance was remarkably large. The re-election of officers was general. Papers were read or addresses delivered by various members, and by Director I. P. Roberts and Dr. Caldwell, and Professors Bailey and Slingerland of the Cornell Univer-

sity Experiment Station; by Director Jordan and by S. A. Beach, Horticulturist, Wendell Paddock, Assistant Horticulturist, all of the New York Agricultural Experiment Station, at Geneva, N. Y.; Mr. W. M. Orr, of Fruitland, Ontario, Superintendent of the government spraying experiments of Canada, was present and read a paper on "Fruit Spraying in 1898." Mr. Roland Morrill, President of the Michigan State Horticultural Society, addressed the Society on the "Pruning and Cultivation of the Peach," and illustrated his observations with stereopticon views. "Insect pests of 1898" was the subject of Professor M. V. Slingerland's paper, and it was illustrated with lantern slides. Numerous other papers were read, and animated discussions held on various topics of practical interest. Herbert W. Collingwood, one of the editors of the *Rural New Yorker*, and a grower of strawberries in New Jersey, was present and read a paper on "The Strawberry and its Dinner," and interspersed the recital with numerous amusing anecdotes and interesting similes.

The display of fruit would have been notable at any time on account of its superior quality, but considering the poor season of 1898, it was of more than usual interest. Ellwanger & Barry, of this city showed forty-five varieties of pears and thirty-six varieties of grapes. William C. Barry made a special exhibit of a basket of select pears, of the Anjou variety, of large size and without blemish. Mrs. Patrick Barry exhibited ten varieties of exotic grapes. The New York State Experiment Station made a very fine exhibit of apples, choice specimens, and a large collection for the season. John B. Collamer & Son, of Hilton, and W. J. Smith, of Parma, N. Y., had fine displays of apples.

A large portion of the time of the meeting was occupied in considering and discussing questions placed by members in the Question Box.

Dr. Jordan's address related principally to the importance of proper management in the distribution and sale of fruit products, so that the grower may realize satisfactory returns for his labor. This part of the fruit growers business was the subject of several papers by members and committees, and much discussion. The tone of the meeting was kept at key pitch throughout, and no time was occupied in reading the reports of Standing Committees. These will be published in full in the Proceedings, as also will all of the discussions, as they were reported in shorthand. The more important ideas and suggestions presented in the various addresses and papers offered at this meeting, will be given place in future issues of this journal.

* *

THE DUST MULCH.

THOUGH SO much has been written and said about saving the moisture in the soil, comparatively few gardeners take advantage of it by means of the dust mulch. If the soil of the garden is allowed to bake over the top forming a hard crust the evaporation of water will be rapid, while if the surface is stirred and pulverized often the moisture cannot rise above the stirred portion, but is kept down near the roots of the plant where it can do the most good. The ground may have been thoroughly plowed and harrowed, well fertilized and put in the best possible shape for raising a good crop, but if the moisture is not kept in the soil a small crop will probably be the result. This is just as true of corn as of the small garden truck. Any mulch will cause the same effect, but one of straw or refuse is not always practicable in a field, and in a garden it is far from ornamental.

The dust mulch makes a very neat appearance, and shows at first glance that the land has had careful attention; the dust mulch cannot be made without thorough cultivation, which also removes the weeds, thus answering a two-fold purpose. The theory of evaporation of water from the soil is not generally understood, but the water rises by capillary action, and as long as the ground is left undisturbed, the air spaces are equal and it rises gradually until it reaches the surface when it is lost in the air. These spaces must be very small or the water cannot rise, and that is just the condition they are in when the soil is packed down hard.

It can be illustrated in this way: Take a lump of loaf sugar and hold it over a cup of liquid so that the liquid barely touches the bottom of the sugar. The liquid is drawn to the top of the lump by capillary action, but if the air spaces in the top of the lump are made larger the liquid will stop when it gets to them, as the wider the spaces the harder it is for the liquid to fill them up and rise further. In just the same way the water in the soil stops when it gets to the dust mulch where the loose earth causes wider spaces.

The work of stirring the surface of the soil should be done at least once a week in a garden, as the mulch thus provided soon packs down again by the action of the weather. When plants grow large enough to shade the ground somewhat, this stirring can be given up. After a rain, as soon as the soil dries off a little, it should be well stirred with a fine garden rake. Those who use a wheel hoe can have an attachment for it which will do the work rapidly and well. Certainly four times as much

ground can be gone over with it as could be covered in the same time with a rake. Our attachment did not come with the wheel hoe but was made and put on by the man who uses it. It has a diamond-shaped frame which can be widened or narrowed to suit circumstances. On this frame are fastened seven narrow shovels, so placed that no two of them run in the same track. These narrow shovels stir the soil thoroughly, as deep as one wants to push them, and being narrow they do not run hard.

The loosened earth dries very fast which, makes it the better mulch, but as it dries it gradually settles together, until, in the course of a few days, it is packed together quite solid and must be stirred again. For a strawberry bed, during its first year it is a grand help, and in a patch of a thousand gladioli planted in rows we also find it useful.

MRS. H. W. WOODWARD.

* *

AN EAST WINDOW.

IT TAKES not only considerable experience, but a certain discrimination to select the particular set of plants for a particular kind of a window. I have in one room a window facing east. It is an old fashioned French one, with two narrow ones on each side. The room in winter is heated only by a drum, so that the plants for it must be suited to a similar window and cool atmosphere.

I bought two iron brackets each having four movable arms and a center stationary arm. These brackets were fastened to the sides of the middle window which gave light on all sides. It has taken some time to select just what is necessary for these brackets and just what will do well. On the stationary arm of one bracket I have a Boston Fern whose long fronds droop down very gracefully and prettily. It revels in a cool, light situation. There is one pot of sweet white violet, which simply will not grow if in a warm room. In this cool place it puts forth its sweet blossoms all winter. Another arm holds a cyclamen, which thrives well in this situation, and, of course, I have one pot of primroses. The fourth arm held a chrysanthemum until that went by, when by that time the Chinese sacred lily was ready for light. I grew three bulbs in a lovely bowl. When they had bloomed themselves to death, a jardiniere of hyacinths and narcissus was ready. Thus the four moveable arms were filled with blooming flowers all winter.

The other bracket I experimented upon. I had used up all the prettiest flowers on the other bracket, that is, those which were suited to this style of room. There were nights when the room became very cold so that I must have plants I could depend upon. In the first place I put a root of the water hyacinth in a pretty glass bowl for one arm. It did not bloom but it was extremely unique and attractive. In this manner I kept a root of the hyacinth over for the next summer. One root will run me out of house and lot in a season. Then I found a tea rose would do well in this room, and, although I got but one rose all winter, the rose bush was so green and so thrifty that it filled its corner. But the *Olea fragrans* compensated for all lack of roses. It bloomed constantly and was as sweet as tea roses and carnations. On the other arm was a big amaryllis which bloomed in February and held its lovely lilies for weeks. On the stationary arm I put the thick leaved variegated *sansevieria* which does just as well in a cool room as in a warm corner.

Next season I shall hang from the center of the brackets a hanging basket of winter oxalis, and a little Japanese Fern Ball. I spray the plants once a week and give them fertilizer during the winter. All are easily grown and eminently satisfactory in a cool east window.

GEORGINA G. SMITH.

* *

MAKE YOUR OWN PLANT CUTTINGS.

The cuttings of many of the plants to be used in the flower garden should be rooted during the months of February or March. Geraniums made during these months should be covered with blooms during the summer months if they are given proper care.

Other plants that add greatly to the beauty of the garden, and which may be propagated by cuttings, are the coleus, *iresine*, *alternanthera* and *centaurea*. These plants will root readily from cuttings. They can be started in a cutting box in a window, which should be as long and wide as desired for the limited space, and about four or five inches deep. It should be filled with clear river sand. When the cuttings are first made, they should be shaded during the heat of the day and sprinkled several times a day until the cuttings become thoroughly established. The sand should always be kept moist but never wet.

Cuttings are often rooted in a deep plate filled with moist sand. There are various contrivances used for rooting cuttings, but in each case the rooting medium is clean, moist sand. Soil is apt to become soggy.—W. H. Moore, Kansas Experiment Station.



March starts the pace.

Avoid unknown agents.

Loose potting is a poor course.

Sweet peas cannot be sown too early.

Cremation for tent-worm egg clusters.

With rapid growth there is great thirst.

Have you a fine clump of weigelas on your lawn?

As a soil fertilizer nothing equals stable manure.

Land may be made too rich for some things, hardly for asparagus.

With all other merits let us remember that petunias are almost drouth defyers.

It's the slack orchardist that puts off pruning until the busy days; then it doesn't get done.

In line. A Missouri nurseryman has a Dewey pear. Now for a Hobson tomato, or, shall it be a peach? Next!

Trees for Honey. The basswood is unequalled, while few kinds of sweets can come up to that gathered from apple blossoms.

The more subscribers, the better can any paper be made. A hint: Your neighbor would be benefitted by becoming a reader.

For a low and exceedingly pretty hedge line at the front or side of the house, use the dwarf Thunberg's Barberry. There is a delicacy in its foliage and a grace in its habit that charm the eye. Perfectly hardy, and needs little if any pruning.

A rose hedge is pleasing. It is easily provided. A wire fence with posts eight feet apart will answer for the frame. Along this, in well prepared soil, plant Prairie Queen or Baltimore Belle, climbing roses, at two feet apart. The screen will prove a thing of beauty and an effective barrier at the same time. It will need but little attention in the way of pruning—much less than an ordinary hedge.

Lettuce under glass often is spoiled by sow bugs. A recent bulletin from the Department of Agriculture, points out that one thing is preferred by the bugs to lettuce, and that is good juicy potatoes, thinly sliced. Even poison the slices with Paris green and the bugs prefer them to lettuce, which at once indicates an easy means of cleaning out the depredators and saving your lettuce. By all means give them what they like best.

Now, that tomatoes are included among vegetables exported to England, why not venture on sweet corn for the same purpose? The people of the British Isles and nearly all Europe are unfamiliar with the nutritious, toothsome corn in-the-ear, and cold storage shipment should put it into the larger markets in prime shape. Once our cousins get a real taste of sweet corn, they could hardly be kept from becoming our customers for large quantities at profitable rates. It's American, you know.

Grafting should be taught in the schools. This is the season to instruct teachers in the art; of which teachers there are none too many. A

more general knowledge of grafting would do wonders for the country in improving the average character of our fruit. Many a man has been deceived by getting fruit trees of kinds he did not order, a severe disappointment. And yet, by grafting, such a dilemma can soon be straightened out through inserting kinds of approved value in the locality. Again, it often happens that varieties which are excellent in other localities, may turn out to be a downright failure elsewhere. By grafting, things can quickly be set aright. The boys easily become interested in this art of peace, and not many lessons, based on correct principles, are required to give them proficiency to a degree that should bring success with eighty or more per cent. of all grafts set.

Window plants in perfection. Here and there we may meet with room plants grown to such a state of perfection as to silence every argument against the difficulty of handling pot plants indoors. A case of this kind was recently beheld in great admiration by the writer, in Delaware county, in this state. The plants occupied two windows in the dining room of the village hotel. The dining room opened into the street after the fashion of an ordinary store, and the plants served as a partial screen to the tables, as seen by passers outside. This location is shown in the annexed engraving. What impressed every beholder was the remarkable beauty and vigor of the plants referred to—it would be hard to go into a greenhouse and find anything finer.



UNCROWDED WINDOW PLANTS—TOP VIEW.

And yet the surroundings and treatment were only such as might be provided in a million homes, with the greatest advantage for beautiful plant effect in mid-winter. Let us note some of the conditions present in this case from which growers may profit. First—the plants occupied the ledge of south windows. Second, and very important—the plants were not crowded in the least. Each one stood clear from the others and the light and sunshine could readily get to the different parts of the plants. Many plant collections are damaged by being unduly crowded. Third—a judicious selection of plants. These embraced only a few kinds, as follows: Abutilons, one large specimen of which was centrally located in each window; geraniums, two good-sized plants in each window, and the same of coleus. There were a few ivy-leaved geraniums, and scarlet impatiens, with two pots of linaria suspended from above. A total of only fifteen plants in a space into which many an amateur would have crowded forty. Fourth—the plants showed good care in watering and fertility of soil, as well as freedom from insects. Not a bad-looking leaf was to be seen in the collection, while, as for flowers, they were becoming numerous, although the time was mid-winter. The size of the plants showed that the season was begun with good-sized specimens. Here is a hint to those who would provide similar plant effects for next autumn: Lay in the stock of necessary plants this spring and grow them outdoors during the summer. Of the abutilons, to

which reference has been made, it may be said that they are not sufficiently appreciated as handsome, free-flowering window plants. If you would have a fine collection, by no means overlook these. But, whatever you plan for next winter's display, start now by buying young, inexpensive plants, and growing them to good size by autumn.

Columbia
Bevel-Gear Chainless, \$75

The Standard of Chainless Construction. Always ready to ride. Requires no care aside from oiling and ordinary cleaning of the outside parts.

Columbia, Models 57 and 58, \$50

Highest Development of the Chain Type, embodying every possible excellence.

Hartfords, - - - \$35

The new Hartfords show many changes that are of distinct advantage.

Vedettes, - \$25 and \$26

You can't find anything to equal the Vedettes at the same price.

Ask any Columbia dealer for a Catalogue, or write to us direct, enclosing a 2-cent stamp.

POPE MFG. CO., Hartford, Conn.

SPRAY BORDEAUX
YOUR FRUIT
WITH THE "INCOMPARABLE"
BORDEAUX NOZZLE
used on "World's Best" Spraying Outfits.
Cut shows our patent **KEROSENE BUCKET SPRAYER**
Makes Emulsion while Pumping.
MADE ONLY BY
THE DEMING CO., SALEM, OHIO.
Twelve varieties of Sprayers. PUMPS OF ALL KINDS. Write us or our Gen'l Western Agents, Hennon & Hubbell, Chicago, Ill.
• Catalogue and formulas mailed FREE.

Boyd's Revolving FLOWER STAND
Fountain Attachment
FOR SPRAYING PLANTS.
JUST THE THING FOR LOVERS OF FLOWERS.
Both for indoor and outdoor service. Holds twenty-five pots. Revolves at will, giving sunlight to each plant. On casters. Easily moved; 5 feet high; weighs only 35 lbs.
We also supply Sets of Pots for this stand.
For particulars, address,
ECLIPSE NOVELTY WORKS
Dept. V, Pulaski, Pa.

740 50¢ Fringe Cards, Love, Transparent, Escort & Acquaintance Cards, LAUGHING CAMERA, Prize Puzzles, New Games, Magical Illusions &c. Finest Sample Book of **CARDS** Biggest List of Visiting and Hidden Name Premiums All for 2c. stamp. **OHIO CARD CO., Cadiz, Ohio.**
When writing to advertisers, mention Vicks Magazine.

THE LAND OF WASHINGTON.

The American people revere Washington—the father of his country—and are ever on the move in quest of new homes in the land he gave them. There is plenty of room for many thousands of farmers, ranchers, stockmen, sheepmen, dairymen, lumbermen, and others engaged in productive industries, in the New Northwest. For information about the development of this great food producing, hunting and fishing country—the land of flowers—one should read the up-to-date **FARMER AND DAIRYMAN**, the oldest, only illustrated, and most prosperous agricultural journal on the Pacific Coast. Published weekly at \$1.00 a year. **JOEL SHOMAKER**, Editor, North Yakima, Washington.

SUCCESSFUL INCUBATORS.



Hot Air or Hot Water.

A standard machine for hatching strong, healthy chicks—self-regulating, patent egg turning trays, drying room under trays, non-explosive lamp—these are a few of its good points. Our 148 p. catalogue gives prices and description, also pointers on poultry buildings, etc., mailed for 60 stamps. Write for it now. **DES MOINES INCUBATOR CO., Box 72, Des Moines, Iowa.**

WATCH AND CHAIN FOR ONE DAY'S WORK.



Boys and Girls can get a Nickel-Plated Watch, also a Chain and Charm for selling 1 1/2 doz. Packages of Blaine at 10 cents each. Send your full address by return mail and we will forward the Blaine, post-paid, and a large Premium List. No money required. **BLUINE CO., Box 321, Concord Junction, Mass.**



MAKE HENS PAY!

If you want to know how others do this, send for our Catalogue and Poultry Guide. It tells all about the poultry business and about the **CYPHERS INCUBATOR** which embodies all the good points of other machines and the faults of none. Sent freight paid to every buyer. Catalogue 10c. Circulars free. **The Cyphers Incub. Co. Box 106 Wayland, N.Y.**

ONE YEAR FOR 10 CENTS

We send our monthly 16-page, 48 col. paper devoted to Stories, Home Decorations, Fashions, Household, Orchard, Garden, Floriculture, Poultry, etc., one year for 10 cents; if you send the names and addresses of six lady friends. **WOMAN'S FARM JOURNAL, 4613 Evans Ave., Saint Louis, Mo.**



BRABAZON'S POULTRY CATALOGUE

FREE! It's beauty; over 50 colored plates. Illustrates and describes fine Turkeys, Geese, Ducks and chickens; gives prices of fowls & eggs. Finest Buyer's Guide published. Inclose 10c. for postage, etc. **J. R. Brabazon, Jr. & Co., Box 47, Delavan, Wis.**

INCUBATORS Best ever invented; self-regulating. For Catalogue, **G. S. SINGER, Cardington, O. Agents wanted.**



DON'T SET HENS

The Same Old Way. **THE NAT'L HEN INCUBATOR** beats the old plan 3 to 1. 100-Egg Hatcher \$2. Cheap in price but a mighty money maker. Send for cat'g telling how to get one free. Agents wanted. **Natural Hen Incubator Co, B46, Columbus Neb**

Grape Vines Small Fruits

Low prices. Descriptive list free. Extra fine stock **CURRENTS, Gooseberries, CAMPBELL'S EARLY Grape.** Quality extra. Warranted true. **T. S. HUBBARD CO., Fredonia, N.Y.**

When writing to advertisers, mention Vick's Magazine.

LADIES TO DO PLAIN SEWING at home, \$1.50 per day; four months work guaranteed; send stamped addressed envelope for full particulars. **Utopian Supply Co., Dept. 85, Philadelphia, Pa.**

When writing to advertisers, mention Vick's Magazine.

Virginia Homes

You learn all about Virginia lands, soil, water, climate, fruit resources, products, mode of cultivation, price, etc., by reading the

Virginia Farmer . . .

Send 10 cents for three months subscription to

FARMER CO., Emporia, Va.

When writing to advertisers, mention Vick's Magazine.

SOME EARLY VEGETABLES.

Next to having a garden at all, is the pleasure of having certain kinds of vegetables and green stuff early in the season. A little extra labor and pains—that which can readily be done by most farmers—will supply for the table delicacies and appetizing vegetables, which, without this extra pains, would come much later in the season or not be grown at all.

Rhubarb or pie plant is heartily enjoyed by most people when it first sends up its juicy, acid stalks in spring, and doubly so when by any means we force the season a couple of weeks, or more, by giving a few plants a sheltered position, and then enclosing with boards, covering the same with some old windows. I shovel the snow off the plants in March, put over them a couple of sash used for double windows on the dwelling house. On cold nights and cold, cloudy days some old mats or carpeting are thrown over the glass. The four hills thus covered give us several messes of nice, tender rhubarb before the remainder of the row, uncovered, gets large enough. Even the latter is forwarded several days by having a wind-break of boards three feet, or so, high, on the north side.

Lettuce is easily started in boxes in the kitchen, or, if there is a furnace in the cellar with a window in the apartment, through which the sun sends its rays apart of the day, this place affords proper conditions for starting a few boxes of lettuce to be transplanted into the garden as soon as the soil is workable. All of the hardy vegetables, like beets, radishes, turnips, etc., may be started in the same way and their maturity hastened a week or two.

No vegetable is easier grown than the radish, and none, costing so little to produce, is more enjoyed in its season when well grown. Radishes are best grown in the hotbed for earliness, but in open ground the seed may be sown as soon as the soil is in working condition. The plants should not be thick enough to crowd each other and if nitrate of soda is quite freely sprinkled over the bed it will stimulate growth and insure tender, brittle roots, which is the beauty of well grown radishes. The Early Scarlet Turnip-rooted and the Early Scarlet Half Long are good varieties. **L. F. ABBOTT.**

PARSLEY AS A BORDER PLANT.

If one can consent to unite the useful with the agreeable in the flower garden, there is no finer or more satisfactory border plant for flower beds; than the common ruffled parsley of the vegetable garden. On several occasions I have so utilized vacant space in flower beds, sowing parsley instead of flower seeds, and always with good results.

The habit of low growth, pretty form and color of foliage, and its long continuance without changing color or dying out, are the strong points to recommend parsley as a fringe for flower beds. Seeds sowed in spring soon germinate, and after attaining natural size, the plants remain in full beauty the remainder of that year, as well as through the following winter if only there are any flowers to bloom and occupy the beds at that season. Cold and freezing weather does not harm the parsley, but it will be in place ready to set off the beds with its fringe of green when the crocus, hyacinths etc., come on.

Not only will it remain through the winter of the first year, but through the coming summer also, if only care be taken to cut back the flower stalks, and prevent its going to seed. This has



PLANT AND SPRIG OF PARSLEY.

been our experience with it. At the same time the cook may cut as many nice crisp sprigs for garnishing dishes, or flavoring soups as she likes. There will be plenty for several families.

Thus may the amateur gardener, or the city resident, cramped for space, combine beauty and utility in one plant. And ten to one, many visitors will ask what it is, and exclaim "How pretty." And if you give them the botanical instead of the common name, many will not know any better, and will beg you to be sure to save them seeds of it.

And, indeed, it is a pretty thing. A sprig of it suits well to put in bouquets, or to work in with flowers for the vase. Were it not that it is a common kitchen herb, it would be much sought after, and extensively cultivated as an ornamental foliage plant for flower beds, and for decorative purposes.

There are several varieties of parsley, all having different forms of leaf. And perhaps the best way, when using it as an ornamental plant, is to mix the several varieties and grow all together.

If any person is incredulous as to the suitability of parsley for the purpose indicated above, let him try a few feet of it, in an out-of-the-way part of the grounds, and note the result.

Virginia.

B. W. J.

GARDEN NOTES.

GLADIOLUS—Everyone admires the gladiolus. The short duration of its bloom is a source of regret to flower lovers. It is quite possible to plant some bulbs in a pot in the house, in February or March, which will be ready to bloom long before those planted in the ground. They can be planted thick together in a box, kept in a north window and watered occasionally. They will be four or five inches high when the ground opens for planting. It is quite a satisfactory manner for treating them.

HANGING PLANTS—The sedums make pretty hanging plants. I have two kinds which grew rapidly and are very pretty. The many colored oxalis make a handsome basket, and familiar to everyone, as is the Wandering Jew.. But beside these old favorites are many new and odd ones. I found Parrot Feather very bright and pretty. Smilax is a dainty drooping plant, and Trailing Queen fuchsia a beauty. The Nepeta is a variegated trailing plant, like the Creeping Jenny of the yard. It is fragrant and bright. The Russelia junccea is a vine covered with bright scarlet blossoms making it a marked addition to the window.

RED, WHITE AND BLUE—For a novelty try red, white and blue flowers. If one wants the colors in pot plants there is the plumbago in scarlet, in white and in blue. Plant a root of

each in a large pot, and there will be a constant display of red, white and blue, for the plumbago blooms the year around and needs only such care as the geranium is given. In the garden one can have red, white and blue ribbons galore. Take the blue larkspur, the red salvia and the white ten weeks stock and one has a splendid combination. They should be planted in narrow rows, to simulate a ribbon. There is a blue aster on the market now. This enables one to have a display of red, white and blue asters late in the fall. The ten weeks stock come in red, white and blue, also. The sweet alyssum, the blue forget-me-not and the scarlet portulaca make a handsome border. The national bed is a source of pleasure also. There is the rose of England, the golden-rod of America, the Scotch thistle, the fleur-du-lis of France, the corn-flower of Germany and the shamrock of Ireland.

G. G. S.

* *

THE GARDEN NOTE BOOK.

Have you not sometimes seen beautiful flowers in the gardens of friends, that you thought would be desirable in your own garden, and when you have inquired the name, received the disappointing answer, "Oh! I don't know. It's a very choice—," something or other, "but I never can remember those names."? Or, have you not, yourself, set some choice plants, bulbs, or seeds in the garden and resolved to know which was best and most suitable for your particular need, only to find before they bloomed that the writing on the labels had become illegible, and that the very plants you most wished to know about had lost all trace of their rightful names?

A way to prevent these provoking occurrences, in one's own grounds at least, is found in the use of a note book, or, better still, a chart. This chart, or the page in the book which takes its place, should be large enough to show distinctly a ground plan of your garden, and the location of each plant or bulb, or row, or bed of seeds, with their names properly marked. In the same way may be kept a record of a new bed or border of roses, the names and location of the individual plants of which you cannot remember, or a bed of named iris, or, in short, anything you may wish to be sure of. With these diagrams properly made and laid away in the writing desk, the names of your treasures are safe.

When blooming season begins there is plenty of use for the note book. As the different strangers step forward and stand on dress parade ready for your inspection, your impressions regarding their value and beauty may be noted, and, later, the time and duration of their blooming period, the treatment required by different varieties, the changes thought best to be made another season, and the various other things that all who cultivate flowers are interested in.

A part of the note book should be set aside for the widow garden, that will furnish much that will be found of interest when making out an order for a new supply of plants. It is most interesting when growing bulbs for winter blooming indoors, to plant a few new kinds, note the time of planting, date and period of bloom, care required, etc., and notes thus made form a useful guide for the next season.

EVAN.

Eastern Oregon.

* *

TO CURE A COLD IN ONE DAY

Take Laxative Bromo Quinine Tablets. All druggists refund the money if it fails to cure. 25 cents. The genuine has L. B. Q. on each tablet.

COMMENTS.

"The Acalyphas are tropical plants," says the January MAGAZINE, and so they are mostly, South America having the greatest number of the 100 species. We have one native annual species, two*, in fact, but I never saw but one, the three seeded mercury Acalypha Virginica. It is not very common but is sometimes numerous in cultivated fields, a foot or more high. If the photograph of the A. hispida in the MAGAZINE had its flowers cut off it would be our plant exactly, except for the large toothed bracts which support the minute clusters of female flowers in the native species, the leaves and the habit of the two are the same. The Euphorbia family, to which the Acalyphas belong, makes quite a point of colored foliage, and our species turns crimson purple in the later summer.

The Stringwood of St. Helena, Acalypha rubra, is of interest as being one of the few plants now known to be extinct. It formed a beautiful small tree and got its name of Stringwood from the long spikes of reddish male flowers which hung in great profusion from the twigs.

Mrs. Sara Colclasure makes a good point in her article in the January MAGAZINE, when she advises its readers not to try to flower large, old chrysanthemum plants. When spring has come and the cellar wintered plants are brought up, having thirty or more strong shoots, starting so vigorously from the great root, there is quite a temptation to repot the whole thing, for it seems as if it would be as much better, as it is bigger than a little rooted slip; but it is not. A large root is sure to fail, at least with me. Cut it all to pieces and set the fragments in separate pots if you want to succeed. But I am less sure of the necessity of shifting from larger to larger pots all through the growing season. Good flowers, or good enough, anyway, can be had without it.

*Three—Ed.

A plant in the open ground, having the whole planet for a pot must be over-potted, if there is any such thing. But such plants seem to rub along somehow, in fact you are sometimes advised to set plants outside to recover from the tribulations of the window garden.

So much for theory, now, for the experience, not my own exactly. A discreet silence concerning my last season's chrysanthemums will be best, though they did well considering what they had to contend with. Peace to their ashes! It is some plants of my sister's that are now to be chanted. There was a George W. Childs, a Judge Hoitt and various yellow and white ones, whose names I do not know, seven or eight in all. The soil was got from a yard where the cows spend the night in summer. They tread mud and manure to a uniform paste in wet days, it may be half manure, though not much is visible in it. It looks like fine black earth. Six- or seven-inch pots were filled, the plants set, and that was the end of it. They stood out in the yard through the summer, watered, I think, every day, unless it rained. What was called "liquid manure" was given now and then, I do not know how, it was no great affair, anyway. As fall came on they were brought indoors for flowering. George W. Childs was four feet high, crowned with "its velvety crimson blooms with a glint of gold," see Miss Greenlee's January "Seed Pods." As she says, it is "royal."

Judge Hoitt, an immense plant when well grown, was taller and larger in every way. The others, naturally smaller and more slender, were, yet, masses of flowers. I cannot imagine why anyone should want, or how they could get, anything any better.

Miss Greenlee speaks of the balsam firs of the North Carolina mountains. Does she mean that they grow in dry soil? Here in Western New York the balsam fir is confined to the marshes naturally, though it will flourish in dry ground if planted there. More balsams are set hereabout



TEA SET FREE

56 PIECES.

Full size for family use, beautifully decorated & most artistic design. A rare chance. You can get this handsome china tea set & one dozen silver plated tea spoons for selling our Pills. We mean what we say & will give this beautiful tea set absolutely free if you comply with the extraordinary offer we send to every person taking advantage of this advertisement. To quickly introduce our Vegetable Pills, a sure cure for constipation, indigestion & torpid liver, if you agree to sell only six boxes of Pills at 25 cts. a box write to-day and we send Pills by mail, when sold send us the money & we send you one dozen Silver plated tea spoons together with our offer of a 56 piece china tea set same day money is received. This is a liberal inducement to every lady in the land and all who received the spoons and tea set for selling our Pills are delighted. **AMERICAN MEDICINE COMPANY, Dept. R 30 WEST 13th St., NEW YORK CITY.**



This Double Buggy Harness, \$20, as good as sells for \$30.

to the consumer exclusively. Our line consists of Rockaways, Surreys, Traps, Phaetons, Stanhopes, Driving Wagons, Top Buggies, Open and Top Road Wagons, Spring Wagons, Delivery Wagons, Milk Wagons, Wagonettes and all styles of Harness.

Send for Large Free Catalogue.

ELKHART

Carriage and Harness Manfg. Co.,

W. B. PRATT, Secy.

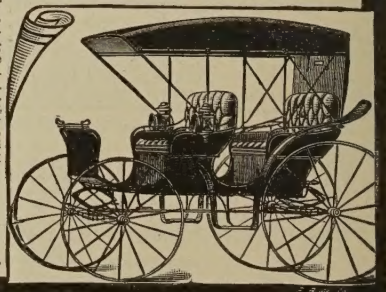
ELKHART, INDIANA.

WE HAVE NO AGENTS.

but have sold to the user direct at factory prices for the past twenty-six years. We ship anywhere for examination. Everything Fully Warranted. We are the largest manufacturers of vehicles and harness in the world selling

This Extension-Top Surrey with double fenders, complete with slide curtains, aprons, lamps, and pole or shafts, for \$72.

Just as good as retails for \$110.



JOSEPH GILLOTT'S STEEL PENS,

THE STANDARD PENS OF THE WORLD.

Numbers 303, 404, 604 E. F., 332, 601 E. F., 1044, and stubs 1008, 1043, and others
Highest Awards, Paris Exposition, 1878 and 1889, and Chicago, 1893.

than any other evergreen, and some of them are forty to fifty feet high and a foot or more through—larger than any in the swamps, so far as I know. I have a notion that certain seeds will not grow except in wet places, while the plants that spring from them like dry ground as well as any.

My Eulalia Japonica zebrina, last summer, though a marsh plant at home, they say, lacked only two inches of nine feet high on dry ground, with thirty-nine flowering stems, a magnificent plant indeed. How much better, think you, would it have been treated as aquatic?

E. S. GILBERT.

TUBEROSE SUGGESTIONS.

The first essential in the successful cultivation of tuberoses is to have fresh, sound bulbs. Bulbs that have blossomed will not bloom again. Order your bulbs early from some reliable dealer. Here, in New Hampshire and in states with a like climate, it is never safe or satisfactory to set in the ground dry, unstarted bulbs like the dahlia or gladiolus, as many do; tuberoses require a long season and Jack Frost frequently catches them just as they are budding. As taking them up from the ground and potting them when the flower buds are nearly ready to open is sure to blight them, the result is a disappointment.

Those lucky mortals who possess a greenhouse or hotbed can easily start them, but these suggestions are intended for tuberoses lovers who do not own these conveniences. First, procure the bulbs about the first of March, or a little later. Then pot them in moderately rich soil. If you are short of pots, as I often am, quart tin cans will do, taking care to punch holes in the bottom and to provide good drainage. Some advise pruning the root severely, and say that they start quicker. After potting, I set the pots in rows behind and under a coal stove, where the fire never goes out. A kitchen range or a dining room stove answers well. Water when dry. Never over-water, and never let them dry out. As soon as the bulbs start move them to the light. This will be in a fortnight, more or less. This makes a very good substitute, in a small way, for a hotbed. I also start extra choice dahlia bulbs in this way. Set tuberoses in the ground about the last of May. I have found it more satisfactory to plunge pots and all, and then any belated bulbs can be removed to the house, even when in bud, with little chance of blighting, but it requires more care all summer in watering, than in the open ground.

C. S. F.

Nashua, N. H.

For the Successful.

Successful incubation is, in the minds of our leading poultry raisers, closely associated with the "Successful" incubator. This thought seems to have had a controlling influence with the judges at the recent exposition in Omaha and with those at the 1898 poultry show held in Chicago. In both places it carried off the highest honors. The 160 page catalogue issued by the Des Moines Incubator Company, of Des Moines, Iowa, manufacturers of the "Successful" incubator, is a most thoroughly useful book for the poultryman. Mailed to any address for six cents in stamps.

Have you noticed the Golden Wedding list of premiums?

100,000 new subscribers for this MAGAZINE in 1899. Will you help in this effort?

VINCA ROSEA AS A BEDDING PLANT.

A remarkably fine example was given last season at Highland Park, in this city, by Mr. John Dunbar, Assistant Superintendent, of the use of Vinca rosea, and its varieties, for bedding. This bed was greatly admired during most of the summer and autumn, by all visitors to the grounds. In response to an inquiry for particulars in raising and using these plants, Mr. Dunbar very kindly gave the following information:

In reply to yours of to-day respecting Vinca rosea. The seeds were sown in a strong hotbed, on March 26th, in shallow "flats." When the seedlings were large enough to handle, they were transplanted to large "flats," and grown along in the hotbeds until the middle of May, and then hardened off. They were planted out in the beds, about one foot apart, June 1st, being then about four to five inches tall. They commenced blooming about June 25th, and by the end of July they formed a dense mass, and entirely covered the beds. They bloomed continuously until the first frosts, which with us here, this year, were about October 15th. The maximum height of the plants was from twelve to fifteen inches.

"I used to grow Vinca rosea largely for bedding purposes in Long Island a good many years ago, and I have always regarded it as one of the most showy and expressive of flowering bedding plants. It is extremely valuable in hot, dry situations. It is also very serviceable for interplanting amongst the roots of early blooming perennials, such as Oriental Poppies, whose stems die down very soon after flowering and leave the ground bare. In such conditions the Vinca roots do not ramble, and injure the perennials in any way, and it looks and flowers well on a scanty diet.

We raise the plants late, because our beds are nearly all occupied with bulbs, and they are not ready for the summer occupants until June 1st, and, anyhow, we have no greenhouses. Where they are required for earlier bedding, the seeds should be sown in the greenhouse about February 1st, and fine, stocky plants can be obtained by May 15th. That was how I used to grow them in Long Island. I have known some growers to sow the seed in the fall, but it is absolutely unnecessary to have the plants so long on one's hands.

THE AIR TUBER.

This is the name given to Dioscorea bulbifera, now raised in New Orleans and about there. The plant is a close relative of what is known as the Cinnamon Vine, which is Dioscorea batatas, and which is cultivated as a climbing vine with sweet smelling flowers, and which at one time was thought would prove a substitute for the potato. A Mr. Normand in the *Rural New Yorker*, says this about D. bulbifera:

"After testing it for two years on my experiment grounds, I find it equal to the Irish potato, with the required seasoning. The plants produce much more than those of the Irish potato on the same space of land. It matures its tubers during the summer, and continues until frost. The tubers are formed in the axils of each leaf, and to see a vine in full bearing is a sight to behold. Some of them are quite large. An analysis of the tuber made by the assistant chemist of our State Experiment Station, shows that it contains protein, 1.82 per cent.; fat, .55; carbohydrates, 20.70. In carbohydrates it compares favorably with beans, sweet potatoes, peanuts and Irish potatoes.


"The tubers are a curiosity on account of their various forms. They look like petrified rocks of a gray silvery color, of the most intricate carved stone work. They suggest the missing link between the vegetable and animal kingdom."

In our native flora the genus Dioscorea is represented by D. villosa, the wild Yam-root.

100,000 new subscribers next year. Will you send a club list?

A PRESENT.

SEND us your address and we will make you a present of the best Automatic **WASHING MACHINE** in the World. No wash-board or rubbing needed. We want you to show it to your friends, or act as agent if you can. You can **COIN MONEY**. We also give a **HANDSOME WATCH** to the first from each county. Address Room 25, N. Y. LAUNDRY WORKS, 80 Murray Street, N. Y.

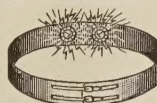
 **Brabazon's Poultry Guide and Catalog**
It's a beauty. Cuts of fowls drawn from life. Price of fowls and eggs. Also 34 years in the poultry yard. Catalog and Buyers Guide all for 10c. **J. R. BRABAZON, Sr.** Finest on earth. Glenview Farm, Delavan, Wis.

LADIES My Monthly Regulator never fails. BOX FREE. Dr. F. MAY, Bloomington, Ill.

"HOW TO GROW MUSHROOMS."

The most practical treatise on this interesting subject ever written. Only 10 cents. Published by **AMERICAN GARDENING**, 136 LIBERTY STREET, NEW YORK, N. Y.

SHORTHAND written in an hour for notes; 6 to 12 weeks for rapid work by non-shading, non-position, connective vowel Permin method. World's Fair award. Trial lesson FREE, self instructor on approval. Write H. M. Permin, Author, Detroit, Mich.

 **THE ELECTRICITY** from the batteries will turn a needle through your table or hand. Cures Rheumatism, Liver and Kidney Disease, Weak and Lame Back, etc. For advertising purposes we will give ONE DOLLAR FREE to one person in each locality. Address E. J. SMEAD & CO., Dept. No. 206, VINELAND, NEW JERSEY.

WANTED A Horticulturist and Landscape Gardener who has had years of experience, would like a position as general manager or superintendent of an estate. References. Address S. D. FERRIS, Care Vicks Magazine, ROCHESTER, N. Y.

 **A DOLLAR RING FREE!**
The greatest value ever offered. The illustrations do not show one half their beauty. There are people wearing these rings on the same hand with diamonds. They always pass for \$10 rings as they are elegantly chased and engraved by hand. They are all the rage now in New York, and are considered just the rings for either lady or gentleman. These rings have been sold for \$6.00 each, but we want to introduce our celebrated perfumery. We want you to help us. We don't want you to do this for nothing. We therefore make you this broad offer. We will give anyone either of these handsome solid gold filled rings who will sell in their neighborhood 20 cases of our perfumery at five cents a case, to their friends. We ask no money in advance. When sold you send the money and we will mail the handsome ring. We take all the risk. Write at once, as this offer will not appear again. If you wish to buy one of these rings and do not care to become our agent it will cost you \$1 alone.
PARIS PERFUMERY CO., 19 Warren St., NEW YORK.

Parents—Please take special notice of this Jubilee Year clubbing offer.

Our Little Folks Magazine

Published by Publishers' Association of Friends.


is a comparatively new and most meritorious 24-page monthly for children up to their teens. It contains large and beautiful pictures, simple stories, puzzles, and a great variety of ingeniously prepared subject matter for the profit and entertainment of young readers. There is no other like it in the field, and we know that all who avail themselves of the following offer will be delighted with their bargain:

The price of Little Folks' Magazine is 75 cts. per year; the price of Vicks Magazine is 50 cts. per year; the two \$1.25. Until further notice

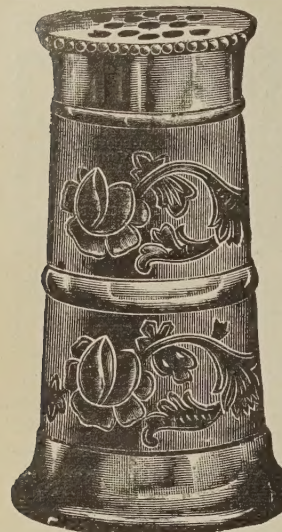
We will send the two 50 cents for One Year for only

Try it,—and if you are dissatisfied get your money.
Vick Publishing Co., Rochester, N. Y.

A Rapid Process of Taxidermy at Home,

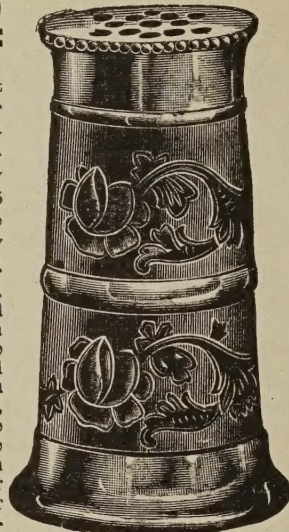
 which all can readily learn. Why pay out \$10 to \$50 for instructions when you can **Learn at Home** for next to no expense. This is the season to mount birds. Write for information, enclosing stamp, and mention Vicks Magazine.
Morris Gibbs, M. D., Kalamazoo, Mich.

For Both 25 cents For Both



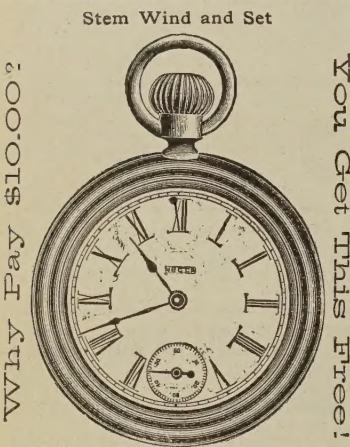
SALT.

If you are looking for a Great Bargain in Fine Silverware never heard of before and that will astonish you, here is one of the Greatest Bargains ever offered by any reliable Manufacturer. For 25 cents we send Prepaid Both the Salt and Pepper Shakers. They are Quadruple Coin Silver Plated. Warranted to wear ten years. Finely engraved and useful as well as ornamental to any table rich or poor. If on receipt of the same you do not think or find them the Greatest Bargain you ever have seen or heard of, return them at once to us and we will refund you your money. We have been doing business in Chicago since 1865. Any Bank or Express Company can tell you our standing. Our Bargain Silverware Catalogue Sent Free.



PEPPER.

J.D. LEONARD MFG. CO., 152-153 MICHIGAN AVE., CHICAGO.



Why Pay \$10.00?

You Get This Free!

THIS BEAUTIFUL WATCH

GIVEN AWAY FREE!!

WITH OUR SELF OPERATING FAMILY WASHER AND BLEACHER.

This washer is automatic, requiring no labor. It is a wonderful labor-saving invention which thoroughly washes and cleanses every kind of fabric, performing its work mechanically, and doing away with the hard labor of wash-day. It requires no assistance and very little attention, yet washes the clothes just as thoroughly as though done by skilled hands. It does away entirely with the wash-board and the back-aches common to wash-day. There is no crank to turn or lever to work, as the hot water in the wash boiler operates this wonderful machine. These washers retail at \$2.00 each (the lowest in the market) and do better and more perfect work than many of the high priced ones.

A GOOD WASHING MACHINE is more desired in a household than any other labor saving device. It is more essential than the sewing machine. Every family needs one and should have it.

We are anxious to get them quickly introduced and know that if one machine is tried in a town it will be the means of creating a demand for a great many more in that town (according to population). Nearly every family will buy one as soon as they learn of the wonderful work done by these machines, wherever they are once tried.

Agents can make \$75.00 to \$100.00 a month selling them; and ladies do equally as well as men. Full directions for use and very liberal terms to Agents are sent with each machine.

We give premiums to ladies of silk dresses, and suits of clothes to gentlemen.

OUR GREAT OFFER.

We wish to get some one in your town to take the agency, or at least to show our washer to their friends, and to interest and to pay them for their trouble. We will for the next sixty days send to every one that remits us \$2.00 for a machine, this beautiful American made stem-winder and Setter Watch, fully regulated before leaving the factory, and guaranteed a good timekeeper, which you can readily dispose of at a good profit on the whole outfit, and furthermore, if you take the agency afterwards and send us an agents order we will put you in one Washer extra, and another Watch also, which will make your first outfit of Watch and Washer entirely Free. This is the most liberal offer ever made by a reliable concern, and will cost us a great deal of money at the start, but we look for our reward in the many agents we will get when they have given the washer a trial and see what a saving of time and labor it is to all housekeepers, and also the handsome income they can realize on its sale.

Parties that want a machine just for their individual use, will get a great bargain, as they get the washer at the regular selling price, and a handsome Watch, guaranteed in every way, thrown in Free, and we trust all such purchasers who take advantage of our liberality will at least speak of the washer to their friends, or recommend some one to us who might act as agent. This is asking very little for the elegant watch we give you. Bear in mind now if you act as agent for us you get the outfit refunded as stated. Our terms, which we send with the washer are very liberal, and agents, whether male or female, can make money faster and easier than with any other article ever put on the market. Everyone buys when they see the work they do and the time and labor they save. We think our offer is so plain, honest and fair that no one can take exception to it. We are hoping to do business with you—not to take any advantage. There is no chance work or guessing in our offer. It is a plain business proposition that will put money in your pocket as well as ours, if you take hold. You can have the county agency if you accept promptly.

HEBRON, ILL., Nov. 11th.

BRINLEY, TENN., Nov. 9th.

GENTLEMEN:—I received the Washer, and it has done all you claimed for it, and more. I can sell a number here, and enclose you a money order for one dozen of them.

Yours, &c., MRS. C. D. TIBBITTS.

DEAR SIRS:—I received my Washer, and am highly pleased. I would not take \$5.00 for it. I will sell a great many for you here.

Yours truly,

MRS. S. C. LANDRUM.

We are an incorporated company of thirteen years standing, which is a guarantee we will do just as we agree. Send at once while our offer holds good and you will never regret it. Satisfaction guaranteed or money refunded. Send us the \$2.00 by P. O., or Express Money Order, or Registered Letter, and we will ship Washing Machine and watch the day order is received. Send your name, post office and nearest express office plainly written.

Address, New York Laundry Works, 78 Murray St., N. Y. City.

SAVE MONEY! BUY YOUR FERTILIZERS DIRECT.

You get the benefit of salesman's expenses and agent's profit. Our entire production goes from factory to farm. Write for free sample and book.

WALKER, STRATMAN & CO., Herr's Island, Pittsburg, Pa.

IOWA FARMS for sale, \$2 per acre cash, balance $\frac{1}{2}$ crop until paid. J. MULHALL, Sioux City, Iowa.

BED-WETTING CURED. Sample FREE. Dr. F. E. May, Bloomington, Ill.

Rubber Goods of every description. Cat'g free. Edwin Mercer & Co., Toledo, O.

One Way.

If each of our readers will renew his subscription, and influence one friend to subscribe for the MAGAZINE, how our subscription list will bound and celebrate that Fiftieth Anniversary.



THE FAMILY COZY-CORNER

FLORAL CHAT.

The glossy foliage and showy flowers of the Chinese Hibiscus are very acceptable on cold, blustery, wintry days. I have no trouble with the plants, using common garden soil, giving plenty of water and keeping them in a south window. Palms help wonderfully to give a tropical appearance to a room, and I find no more trouble with this royal plant than I do with the most common of window plants. The plants are easily raised from seeds, if one cares to attempt it, the first two or three leaves so much resemble grass that they are often mistaken for it and, as such, pulled up and thrown away. The Otaheite orange is a curiosity that one never tires of. I use common soil for it, and give plenty of water and good drainage, and keep it in a south window; nature will do the rest. Mine is, at present, three years old, has four ripe oranges on it, and is about a foot and a half high, well branched, in fact is a miniature tree in every way. It has fruit on the year 'round, both ripe and green, and in season produces an abundance of delightfully fragrant blossoms.

In the spring of '97 I bought an amaryllis, "Empress of India," and felt guilty of an act of extravagance for so doing. The plant grew rapidly and in the spring of '98 it gave us three magnificent blossoms. I am so well pleased with it that I unhesitatingly urge others to get it. It will be an addition that they can point to with satisfaction. I grow the bulb in a mixture of sand and a rich, black loam, keeping it in the sunshine and giving plenty of water when growing freely.

If every one who owns a home in Nebraska should resolve to plant this spring one shrub, and that shrub a Tamarix Africana, it would be an improvement that any western farmer could well be proud of, as this is one of the few shrubs that stand our trying winters without winter killing. MRS. N. B. H. Nebraska.

CONTENTS.

Adiantum tetraphyllum. (Illustrated)	68
Air Tuber, The	79
Annual Flowers	72
Anthurium Crystallinum. (Illustrated)	69
Azalea, Madame Masson. (Illustrated)	69
Begonia, A Hardy. (Illustrated)	66
Buds and Fruit. (Illustrated)	76
A Rose Hedge—Lettuce Under Glass; Tomatoes and Sweet Corn for Export; Grafting; Window Plants.	
Cannas, Select	70
Comments	78
Current Notes	69
Dahlia, The Cactus. (Illustrated)	65
Dahlias for Exhibition	71
Dust Mulch, The	75
Entomologist, New York State	72
Evergreens In and Out of Place. (Illustrated)	74
Family Cozy Corner	80
Floral Chat.	
Fatsia Japonica variegata. (Illustrated)	71
Garden Notes	77
Garden Note Book	78
Garden of Our Dreams, The	66
Gardening and Old Age	72
Hints for March	72
Horticultural Society, Western New York	74
Labels, Plant	68
Letter Box	73
Violets in the House; Monthly Roses—Mystery and Rex Begonias; Twelve Hardy Roses—Spirea Arguta; A Small Greenhouse; Aspidistra—Sweet Pea Shrub—Daphne Cneorum—Olea fragrans; Ipomoea—Calla—Lilacs; Arrangement of Shrubs—Moles.	
Lettuce, Soil for Forcing	72
Lily—Name Corrected	72
Parsley as a Border Plant. (Illustrated)	77
Plant Cuttings, Make Your Own	75
Plants, Seedling for Bedding	74
Potatoes, Healthy	71
Rose, Gardania. (Illustrated)	67
Seed Pods	68
Adiantum tetraphyllum; The Anthuriums; Camellia; Lifting Heavy Plants; Violets; The Golden Gate Rose; Azaleas; New Crimson Rose.	
Tuberose Bulbs, Preparing for Planting. (Illustrated)	70
Tuberose Suggestions	79
Vegetables, Some Early	77
Vinca Rosea as a Bedding Plant	79
Wildings of Eastern Oregon	67
Window, An East	75

Chichester's English Diamond Brand.

PENNYROYAL PILLS

Original and Only Genuine.

SAFE, always reliable. LADIES ask Druggist for Chichester's English Diamond Brand in Red and Gold metallic boxes, sealed with blue ribbon. Take no other. Refuse dangerous substitutions and imitations. At Druggists, or send 4c. in stamps for particulars, testimonials and "Relief for Ladies," in letter, by return Mail. 10,000 Testimonials. Name Paper.

Chichester Chemical Co., Madison Square, Sold by all Local Druggists, PHILADELPHIA, PA.